EFFECT OF PRANAYAMA ON AGED PERSONS IN RELATION TO SUICIDE IDEATION

A DISSERTATION

Submitted for the Partial Fulfillment of the degree of

MASTER OF SCIENCE
IN
PSYCHOLOGY

Forwarded
CPKhokhar

MKumar
09/05/16

SUPERVISOR

Dr. Manoj Kumar Chauhan
MSc., Ph.D.

ASSISTANT PROFESSOR
Department of Psychology
Gurukul Kangri Vishwavidyalaya, Haridwar (U.K.)

Shashikumar

RESEARCHER

Sashi Kumar

DEPARTMENT OF PSYCHOLOGY
GURUKUL KANGRI VISHWAVIDYALAYA
HARIDWAR (U.K) – 249404 [INDIA]
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DECLARATION

I hereby declare that the research work entitled, **"Effect of Pranayama on Aged Persons in relation to Suicide Ideation"** has been carried out by me, under the guidance of **Dr. Manoj Kumar Chauhan,** Assistant Professor, Department of Psychology, Gurukul Kangri University, Haridwar.

Further, it is mentioned that the research data sited in this dissertation are original findings of my work.

Shashikumar

Dated:- 09/05/16 **(SASHI KUMAR)**

CERTIFICATE

This is certify that the research work embodied in this dissertation entitled, **"Effect of Pranayama on Aged Persons in relation to Suicide Ideation"** presented by **Sashi Kumar** has been carried out under my supervision and guidance for partial fulfillment of the award of the degree of **Master of Science** in **Psychology** at Department of Psychology, Gurukul Kangri University, Haridwar.

M Kumar

Dated:- 09/05/16

(Dr. Manoj Kumar Chauhan)

Assistant Professor
Department of Psychology
Gurukul Kangri Vishwavidyalaya, Haridwar

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Shashi Kumar

Dated:- 09/05/16 **(SASHI KUMAR)**

CONTENTS

LIST OF ABBREVIATIONS USED IN THE STUDY

S.D.	= Standard Deviation
SE_D	= Standard error of the difference between two sample means
SE_M	= Standard error of mean
I.V.	= Independent Variable
D.V.	= Dependent Variable
N	= Total Number of Scores
df	= Degree of Freedom
$\sum$	= Summation
σ	= Standard Deviation
ls	= Level of Significance
t	= Critical Ratio
M_1	= Mean of sample 1
M_2	= Mean of sample 2
$t_{0.05}(29)$	= In t-table, 't'-value on the df (29) at 0.05 level of significance.
$t_{0.01}(29)$	= In t-table, 't'-value on the df (29) at 0.01 level of significance.

CHAPTER -1

THE CONCEPTUAL FRAMEWORK

i) Introduction

ii) Description of Independent Variables

iii) Description of Dependent Variables

iv) The objective of this study

CHAPTER-1

CONCEPTUAL FRAME WORK

INTRODUCTION

Older age is the single most important predictor for cognitive decline and amentia. Older adults are also particularly at risk of social isolation, as they withdraw from the labour market (which may deprive them of a steady income) and become more susceptible to chronic disease (which may deprive them of their mobility, independence and cognitive skills). Feelings of isolation can also come about due to the loss of their partner or friends to illness, or due to inattentive or uncaring family members. The elderly are also vulnerable to physical neglect or abuse, either by formal or informal cares, and this has obvious negative implications for their state of well-being. Social and family isolation and also bereavement are significant predictors of depression in older age. Since chronic physical illness is also a risk factor for depression, the higher prevalence of physical health conditions in this age group further contributes to elevated rates of depression.

The changing demographic scenario and population projections of India indicate that the growth rate of Indian older adults (aged 60 years and above) is comparatively faster than other regions of the World. Since recent past, due to marked increase in life expectancy, rise in number and proportion of older adults the population of older adults is increasing at a fast pace. In India at present, older adults constitute 7.6% of total population. Within three decades, the number of older adults has more than doubled i.e. from 43 million in 1981 to 92 million in 2011 and is expected to triple in the next four decades i.e., 316 million. This clearly reveals that the growth rate of Indian older adults is comparatively faster than in other regions of the World. The life expectancy at birth has also increased from 62.5 years in 2000 to 66.8 years in 2011. Rapid growth in percentage and proportion of older adults in the country is associated with major consequences and implications in all areas of day-to-day human life, and it will continue to be so. As a result, the aged are likely to suffer with problems related to health and health care, family composition, living arrangements, housing, and migration.

Traditionally, the family has been the primary source of care and material support for the older adults throughout Asia. And, the Indian family system is often held at high position for its qualities like support, strength, duty, love, and care of the elderly. The responsibility of the children for their parents' wellbeing is not only recognized morally and socially in the country, but it is a part of the legal code in many states in India. But urbanization, modernization, industrialization, and globalization

have brought major transformations in the family in the form of structural and functional changes. As a result of this socio-demographic .changes, older adults at times are forced to shift from their own place to some institutions/old age homes. The practice of Yoga developed in India centuries ago to promote a physical, mental and spiritual balance. Traditional practice includes physical postures (Asana), breathing exercises (Pranayama), meditation, study of ancient texts and guidelines for lifestyle.

In Vedic Sanskrit, yoga (from the root *yuj*) means "to add", "to join", "to unite", or "to attach" in its most common literal sense. By figurative extension from the yoking or harnessing of oxen or horses, the word took on broader meanings such as "employment, use, application, performance" (compare the figurative uses of "to harness" as in "to put something to some use"). All further developments of the sense of this word are post-Vedic. There is a broad variety of schools, practices, and goals in Hinduism, Buddhism and Jainism. Among the most well-known types of yoga are Hatha yoga and Raja yoga. The concept of yoga originated from the Yoga Sutras of Patanjali date from the first half of the 1st millennium CE. Many studies have tried to determine the effectiveness of yoga as a complementary intervention for cancer, schizophrenia, asthma, and heart disease. Yoga may reduce risk factors and aid in a patient's psychological healing process. Apart from the spiritual goals, the physical postures of yoga are used to alleviate health problems, reduce stress and make the spine supple in contemporary times. Yoga is also used as a complete exercise program and physical therapy routine. While the practice of yoga continues

to rise in contemporary American culture, sufficient and adequate knowledge of the practice's origins does not. According to Andrea R. Jain, Yoga is undoubtedly a Hindu movement for spiritual meditation, yet is now being marketed as a supplement to a cardio routine.

Patanjali's writing also became the basis for a system referred to as **"Ashtanga Yoga"** ("Eight-Limbed Yoga"). This eight-limbed concept is derived from the 29th Sutra of the Book 2 of Yoga Sutras. They are:

1. Yama (The five "abstentions"):

Ahimsa (Non-violence, non-harming other living beings), Asteya (non-stealing), Satya (truthfulness, non-falsehood), Brahmacharya (celibacy, fidelity to one's partner), and Aparigraha (non-avarice, non-possessiveness).

2. Niyama (The five "observances"): Sauca (purity, clearness of mind, speech and body), Santosha (contentment, acceptance of others and of one's circumstances), Tapas(persistent meditation, perseverance, austerity), Svadhyaya (study of self, self-reflection, study of Vedas), and Ishvara-Pranidhana (contemplation of God/Supreme Being/True Self).

3. Asana: Literally means "seat", and in Patanjali's Sutras refers to the seated position used for meditation.

4. Pranayama ("Suspending Breath"): Paraná, breath, "ayama", to restrain or stop. Also interpreted as control of the life force.

5. Pratyahara ("Abstraction"): Withdrawal of the sense organs from external objects.

6. Dharana ("Concentration"): Fixing the attention on a single object.

7. Dhyana ("Meditation"): Intense contemplation of the nature of the object of meditation.

8. Samadhi ("Liberation"): merging consciousness with the object of meditation.

PRANAYAMA:

Pranayama has the capacity of freeing the mind from untruthfulness, ignorance and all other painful and unpleasant experiences of the body and mind; and when the mind becomes clean it becomes easy for the Sadhaka to concentrate on the desired object and it becomes possible for him to progress further in the direction of Dhyana and Samadhi. By Yogasanas, were move the distortions and disabilities of the physical body and bring it into discipline. However Pranayama influences the subtle and the physical bodies in a greater measure than Yogsanas do and that too in a perceptible manner. In the human body, lungs, heart and brain hold very important positions and they depend on each other heavily for their health. Physically, Pranayam appears to be a systematic exercise of respiration, which makes the lungs stronger, improves blood circulation, makes the man healthier and bestows upon him the boon of a long life. Physiology teaches us that the air (Prana) we breathe in fill sour lungs, spreads in the entire body, providing it with essential form the body, take them to the heart and then to the lungs, which throws the useless material like carbon dioxide out of the body through the act of exhalation. If this

action of the respiratory system is done regularly and efficiently, lungs become stronger and blood becomes pure. However, most of the people do not have the habit of breathing deeply with the result that only one-fourth part of the lungs is brought into action and 75 percent remains idle. Like the honeycomb, lungs are made of about 73 million cells, comparable to a sponge in their making. On normal breathing, to which we all are accustomed, only about 20 million pores in the lungs get oxygen, whereas remaining 53 million pores remain deprived of the benefit, with the result that they get contaminated by several diseases like tuberculosis, respiratory diseases and several ailments like coughing, bronchitis etc.

TYPE OF PRANAYAMA

1. *BHASTRIKA PRANAYAMA:*

Procedure: Take deep breaths and then completely breathe out.

Duration: 2 minutes at least. 5 minutes max.

Benefits: heart, lungs, brain, depression, migraine, paralysis, neural system, aabha.

2. *KAPAL BHATI PRANAYAMA*:

Procedure: Push air forcefully out. Stomach will itself go in.

Duration: Start with 30 times or 1 minute. Increase up to 5 minutes up to 10 minutes max.

Benefits: aabha, tej, obesity, constipation, gastric, acidity, Croesus(liver), hepatitis B, uterus, diabetes, stomach problems, cholesterol, allergic problems, asthma, snoring, concentration, and even cancer and AIDS.

Tips: heart and high BP patients, and weak people should do it slowly.

Swamiji says "*dhartikisanjivinihaikapal-bhatipranayam*" and that it"curesall diseases of world".

3. *BAHARYA PRANAYAMA:*

Procedure: Breathe air out, touch chin to chest, squeeze stomach completely and hold for a while. Then release chin, breathe in slowly.

Duration: 3 times to 5 times normally. Maximum up to 11 times. And extremely max up to 21 times (In winters).

Benefits: stomach (udder), hernia, urinal, uterus

Tips: not for heart and high BP patients

4. *ANULOM VILOM PRANAYAMA:*

Procedure: Hold your right nasal with thumb, breathe in from left. Now open right nasal and close left nasal with middle and ring finger and breathe out from right nasal. Now breathe in from right nasal. Now close right nasal and open left and breathe out and in from left nasal, and so on.

Duration: at least 10 minutes.

Benefits: heart, high BP, heart blockage, vatt-kaff-pitt, arthritis, cartilage, bent ligaments, sinual fluid reduced, Parkinson, paralysis, neural related, depression, migraine pain, asthma, sinus, allergy

Tips: breathe in to lungs not to stomach. No organ in stomach absorbs oxygen. Do not hurry. Do it slowly. Rest when ever needed.

5 BHRAMRI PRANAYAMA

Procedure: Close ears with thumb, index finger on forehead, and rest three on base of nose touching eyes. Breathe in. And now breathe out through nose while humming like a bee.

Duration: 10 mins.

Benefits: tension, hypertension, high BP, heart, heart blockage, paralysis, migraine pain, confidence, concentration

6. ***UDGEETH PRANAYAMA:***

Description: God made this panda [body] and this bhramanda [universe] both in the form of 'Omkara' is not a particular person of figure but it is a divine power which is controlling and regulating the whole universe. Saying Om gives you the energy from the universe.

Procedure: Breathe in deeply through the nose first, feel the diaphragm move down, allowing the lungs to expand and forcing the abdomen out and then feel pure chest expand with your collar bones rising last .exhale very slowly while saying allow the syllable to draw out as slowly as you can make sure to keep the O long and the M short. (OOOOOOOOM).

Duration: 10 mins or more.

Benefits: Meditation

Meditation

Procedure: close your eyes and sit quietly. Breathe in naturally. Concentrate the mind on inhaling and exhaling and think of god. God has created our eyebrows, eyes, nose, ears, lips, heart etc.

Duration: 2 to 3 minutes or more.

Benefits: physical mental and spiritual energy.

THEORIES EXPLORING PSYCHO-SOCIO-BIO INTELLECTUAL AND MUTUAL INTEGRATION IN AGED PERSONS

SOCIAL DISENGAGEMENT THEORY:

According to Manthorpe (1994), Cumming & Henry's (1961) *social disengagement theory* represented the first major attempt to produce a theory about individual' relationships with society. Based on a five-year study of 275 50-90-year-olds in Kansas City, USA, Cumming and Henry claimed that:

'Many of the relationships between a person and other members of society are served and those remaining are altered in quality.'

This social disengagement involves the *mutual withdrawal* of society from the individual (through compulsory retirement, children growing up and leaving home, the death o spouse and so on) and of the individual from society (Cumming, 1975). As people grow older, they become more solitary,

retreat into the inner world of their memories, become emotionally quiescent, and engage in pensive self-reflection.

Cumming sees disengagement as having three components; (a) *shrinkage of life space* refers to the tendency to interact with fewer other people as we grow older, occupy fewer roles; (b) *increased individuality* means that in the roles that remain, older people are much less governed by strict rules and expectations; (c) the *acceptance* (even embrace) *of these changes,* so that withdrawal is a voluntary, natural and inevitable process and represents the most appropriate and successful way of growing old.

As far as society is concerned, the individual's withdrawal is part of an inevitable move towards death–the ultimate disengagement (Manthorpe, 1994). By replacing older individuals with younger people, society renews itself and the elderly are free to die (Bromely, 1988).

ACTIVITY (OR RE-ENGAGEMENT THEORY) THEORY:

The major alternative to disengagement theory is *activity (or re-engagement) theory* (Havighurst, 1964; Maddox, 1964). Except for inevitable biological and health changes, older people are the same as middle-aged people, with essentially the same as middle-aged people, with essentially the same psychological and social needs. Decreased social interaction in old age is the result of the withdrawal of an inherently ageist society from the ageing person, and happens against the wishes of most elderly people. The withdrawal is not mutual.

Optimal ageing involves staying active and managing to resist the 'shrinkage' of the social world. This can for as long as possible, and then

finding substitutes for spouses and friends upon their death (such as grand children). It is important for older adults to maintain their *role counts,* to ensure they always have several different roles to play.

SOCIAL EXCHANGE THEORY:

According to Dyson (1980), both disengagement and activity theories fail to take sufficient account of the physical, social and economic factors, which might limit people's choices about how they age. Age robs people of the capacity to engage in the reciprocal give-and-take that is the hallmark of social relationships, and thus weakens their attachment to others. In addition, Dowd (1975) argues that:

'Unlike the aged in traditional societies, older people in industrialized societies have precious few power resources to exchange in daily social interaction.'

This inequality of power results in dependence on others and compliance with others' wishes. However, for both Dyson and Dowd there is a more positive aspect to this loss pf power. Adjusting to old age in general, and retirement in particular, involves a sort of *contact* between the individual and society. The elderly give up their roles as economically active members of society, but in *exchange* they receive increased leisure time, they receive increased leisure time, take on fewer responsibilities and so on. Although the contact is largely unwritten and not enforceable, most people will probably conform to the enforceable, most people will probably conform to the expectations about being old, which are built into social institutions and stereotypes.

SOCIO-EMOTIONAL SELECTIVITY THEORY:

According to *socio-emotional selectivity theory* (SST: Carstensen 1992 1993; Carstensen & Turk-Charles, 1994), social contact is motivated by various goals, including basic survival, information seeking, development of self concept and the regulation of emotion. Whilst they all operate throughout life, the importance of specific goals varies, depending on one's place in the life cycle. For example, when *emotional regulation* is the major goal, people are *highly selective* in their choice of social partners, preferring familiar others. This selectivity is that its peak in infancy and old age: the elderly turn increasingly to friends and adult children for emotional supports.

According to SST, a major factor contributing to these changes in social motives is *construal of the future,* which is indicated by chronological age. When the future is perceived as largely open-ended, long-term goals assume great significance. However, when the future is perceived as limited attention shifts to the present. Immediate needs, such as emotional states become more salient. So contrary to disengagement theory (which seems reduced social contact as being caused by emotional states becoming diluted and dampened down), SST predicts that emotional concerns will become more important in old age.

According to Carstensen (1996), the findings relevant to SST taken together paint quit an optimistic picture. Age-related reduction in social contact appears to be highly selective (rather than reflecting a reduced capacity), such that interaction is limited to those people who are most

familiar and can provide the most emotional security and comfort. This is an excellent strategy when time and social energy need to be invested wisely.

PSYCHOLOGICAL THEORY:

Another alternative to disengagement and activity theories is Erikson's *psychosocial theory.* A more valid and useful way of looking at what all elderly people have in common might be to examine the importance of old age as a stage of development, albeit the last (which is where its importance lies.)

In old age, there is a conflict between *ego-integrity* (the positive force) and *despair* (the negative force). As with the other psychosocial stages, we cannot avoid the conflict altogether, which occurs as a result of biological, psychological and social forces. The task us to end this stage, and hence life, with *greater* ego-integrity than despair, and this requires us to take stock of our life, reflect on it, and assess how worthwhile and fulfilling it has been.

Fear of death *is the most conspicuous symptom of despair. In despair, we express the belief that it is too late to undo the past and turn the clock back in order to right wrongs or do what has not been done. Life is not a 'rehearsal', and this is the only chance we get.*

THE CHARACTERISTICS OF *EGO-INTEGRITY:*

1. The belief that life does have a purpose and makes sense.
2. Accepting that, within the context of our lives as a whole, what happened was somehow inevitable and could only have happened when and how it did.

3. Believing that all life's experiences offer something of value, and that we can see how we have grown psychologically as a result of life's ups and downs, triumphs and failures, calms and crises.
4. Seeing our parents in a new light and being able to understand them better, because we have lived through our own adulthood and have probably raised children of our own.
5. Realizing that we share with all other human beings, past, present and future, the inevitable cycle of birth and death. Whatever the historical, cultural and other differences, we all have this much in common. In the light of this, death 'loses its sting.'

SOCIO ENVIRONMENT THEORY:

This theory directs itself at an understanding of the effects of the immediate social and physical environment on the activity pattern of the aged individuals. The chief proponent of this theory, Gubrium (1973) concerns himself with the meaning old people place on life and with effects different physical and social contexts may have on that meaning. The approach is based on the assumption that persons respond to social meaning of events rather than to some "absolute" aspect of these events. Two factors that affect the meaning old people place on events and, thus, their interaction patterns are the physical proximity to other persons and homogeneity of environment.

Aging, thus, seems to be a whole array of irreversible biological and psychological changes that occur in a genetically mature organism, with the passage of time, affecting adversely its survival and adjustment potency and

eventually to death Gerontology, the study of aging is a tremendously varies and complex field, encompassing all the processes, which are the part of aging experience, as well as those which intrude upon, and affect, that experience. Thus, gerontology is truly a multidisciplinary field, involving four radical aspects varying degrees of discreteness and overlap. These may be called the "biological", the "psychological", the "sociological", and the "socio-psychological" or "behavioral" (Birren and Renner, 1977).

1. **Biological Aging:** Biologists regard the normal aging process as a complex or progressing changes in cellular composition, tissues function, neuromuscular system, and reduction in the capacity to integrate the organ systems. Parallel to these changes in an increasing prevalence of long term, chronic disease, which result in slowing down of performance, and decline in energy reverse. "Senescence", the deteriorative nature of biological aging, has been a major focus (Ward, 1979). The health of the elderly is a crucial factor in the impact of aging on the individual's self image and personality, and the reaction of society to aging.

2. **Psychological Aging:** The psychology of aging analyses the changing in sensory processes, conceptual capacities, psychomotor performance, mental functioning, and so on. Psychologists are also concerned with the changes in the personality and behavior of the aging individual. Attention is being given to external influences, such as cultural expectations and environmental factors.

3. **Sociological Aspects:** The changing during old age is characterized by changing situation of the individual as the member of the family,

[illegible] to death Gerontology, the study of aging is a tremendously varied and complex field, encompassing all the processes which are the part of aging experience, as well as those which impinge upon and affect this experience. Thus gerontology is truly a multidisciplinary field. It includes four related aspects [illegible] which may be called the "biological", the "psychological", the "sociological", and the "socio-psychological" or "emotional" (Dutta and [illegible], 19[illegible]).

1. Biological Aging: Biologists regard the aging process as one that is progressive [illegible] at [illegible] cumulative [illegible] and regulatory systems and a reduction in [illegible] of organs and systems. Parallel to these [illegible] there is [illegible] of long-term chronic disease, which result in slowing down of performance and decline in [illegible]. [illegible] the [illegible] has been a major focus ([illegible], 19[illegible]). The [illegible] is a crucial factor in the [illegible] of aging, of the individual [illegible] and [illegible] and the [illegible] of [illegible].

2. Psychological Aging: The psychology of [illegible] sensory processes, [illegible] [illegible] [illegible] the [illegible] of [illegible] the person's [illegible] behavior of the aging [illegible] or [illegible] [illegible] such as [illegible] [illegible] [illegible].

3. Sociological Aspects: The [illegible] [illegible] old age [illegible] changing [illegible] of the [illegible] [illegible] [illegible] of [illegible]

community, and society. These include completion of parental role, retirement from work, reduced income, in many cases restricted mobility induced by disease and loss of spouse. This social context and encompasses the family and friends at one level, and the society or culture at another level. The social framework determines the meaning of aging for the individual and whether or not aging will be primarily a positive and negative experience.

4. **Behavior Aspects:** The fourth aspect of aging is concerned with the meaning the individual ascribes to the changes and internal and external adjustments he makes to them (Tibbits, 1960). These include inner reactions with regard to such matters as changing self-image, feeling, mental-well-being and tolerance to stress. Social gerontologists are also interested in changing status and role; relationship with family members, people at work, and others; and organization of behavior in term of expansion or constriction of life space.

SUICIDE IDEATION

Suicide (from **Latin** *sui caedere*, to **kill** oneself) is the act of intentionally ending one's own **life**. Suicide Behavior is as old as human race but it is only in the last few decades. Studies have directed to understand the demographic psychosocial and other variables related to suicide. In many developed and developing countries, 20-40% of deaths in men aged 15-34 are the result of homicide or suicide. Suicide is seen as an ultimate step in the escape from self and the world, as a problem solving for hopelessness.

About half the people who kill themselves have a history of deliberate self-harm, an episode having occurred within the year before the death in 20-25%. In 2002, for the eighth year in a row Kerala has retained the dubious distinction of recording India's highest suicide rate. Even more alarming is the fact that every year the rate has only been going up and now it is almost triple that of the national average. Social scientists see as a paradox that India's most literate state should hold this dubious record in suicides.

Suicide is one of the commonest causes of death among young people. The latest mean worldwide annual rates of suicide per 100,000 are 0.5 for females and 0.9 for males among 5-14-year-olds, and 12.0 for females and 14.2 for males among 15-24-year-olds. Suicide is the sixth leading cause of death among children aged 5-14 years, and the third leading cause of death among all those 15-24 years old. In most countries, males outnumber females in youth suicide statistics. There are far more suicidal attempts and gestures than actual completed suicides. One epidemiological study estimated that there were 23 suicidal gestures and attempts for every completed suicide. Though female teens are much more likely to attempt suicide than males, male teens are more likely to actually kill themselves.

The suicide rate among young teens and young adults has increased by more than 300% in the last three decades. Social changes that might be related to the rise in adolescent suicide include an increased incidence of childhood depression and decreased family stability. Some researchers argue that economic and political institutions have penetrated the family unit, reducing it to a consumer unit no longer able to function as a support system,

and no longer able to supply family members with a sense of stability and rooted-ness. Awareness of the existing state of the world, now threatened by sophisticated methods of destruction, can cause depression which contributes to the adolescent's sense of frustration, helplessness, and hopelessness. Faced with these feelings and lacking coping mechanisms, adolescents can become overwhelmed and turn to escapist measures such as drugs, withdrawal, and ultimately suicide.

The rising rate has also been explained as a reaction to the stress inherent in adolescence compounded by increasing stress in the environment. Adolescence is a time when ordinary levels of stress are heightened by physical, psychological, emotional, and social changes. Adolescents suffer a feeling of loss for the childhood they must leave behind, and undergo an arduous period of adjustment to their new adult identity. Yet society alienates adolescents from their new identity by not allowing them the rights and responsibilities of adulthood. They are no longer children, but they are not accorded the adult privileges of expressing their sexuality or holding a place in the work force. Our achievement-oriented, highly competitive society puts pressure on the teens to succeed, often forcing them to set unrealistically high personal expectations. There is increased pressure to stay in school, where success is narrowly defined and difficult to achieve. In an affluent society which emphasizes immediate rewards, adolescents are not taught to be tolerant of frustration.

Suicidal ideation is defined as considering or fantasizing about taking one's own life. Ideation may range from vague or unformed urges to

meticulously detailed plans and posthumous instructions. According to medical practice, severe suicidal ideation, that is, serious contemplation or planning of suicide, is a medical emergency and that the condition requires immediate emergency medical treatment.

Suicidal ideation is having thoughts of suicide or of taking action to end one's own life. ***Suicidal ideation*** includes all thoughts of suicide, both when the thoughts include a plan to commit suicide and when they do not include a plan. Suicidal ideation is measured in the Youth Risk Behavior Survey by the question "During the past 12 months, did you ever seriously consider attempting suicide?"

Attempted suicide generally refers to an act that was intended to cause death but didn't. Many suicidal people engage in suicidal activities that do not result in death. These activities fall under the clinical designation of ***parasuicide***. Those with a history of such attempts are almost 23 times more likely to eventually end their own lives than those who don't participate in such activities (Shaffer, D.J. 1988).

Sometimes, a person will make actions resembling suicide attempts while not being fully committed, or in a deliberate attempt to have others notice. This is called a ***suicidal gesture*** (also known as a "cry for help"). Prototypical methods might be a non-lethal method of self-harm that leaves obvious signs of the attempt, or simply a lethal action at a time when the person considers it likely that he/she will be rescued or prevented from fully carrying it out.

On the other hand, a person who genuinely wishes to die may fail, due to lack of knowledge about what they are doing, unwillingness to try methods that may end in permanent damage if he fails or harms others, or an unanticipated rescue, among other reasons. This is referred to as a ***suicide attempt***. (Edouard Manet: Suicide, 1877).

Distinguishing between a ***suicide attempt*** and a ***suicidal gesture*** may be difficult. Intent and motivation are not always fully discernible since so many people in a suicidal state are genuinely conflicted over whether they wish to end their lives. One approach, assuming that a sufficiently strong intent will ensure success, considers all near-suicides to be suicidal gestures. This however does not explain why so many people who fail at suicide end up with severe injuries, often permanent, which are most likely undesirable to those who are making a suicidal gesture. (See: self-harming.) Another possibility is those wishing merely to make a suicidal gesture may end up accidentally killing themselves, perhaps by underestimating the lethality of the method chosen or by overestimating the possibility of external intervention by others. Suicide-like acts should generally be treated as seriously as possible because if there is an insufficiently strong reaction from loved ones from a suicidal gesture, this may motivate future, and ultimately more committed attempts.

To be considered suicide, the death must be a central component and intention of the act, not just a certain consequence; hence, ***suicide bombing*** is considered a kind of bombing rather than a kind of suicide, and martyrdom

usually escapes religious or legal proscription. There are only legal consequences when there is death and proof of intent.

In the technical literature the use of the terms ***parasuicide***, or deliberate self-harm (DSH) are preferred – both of these terms avoid the question of the intent of the actions.

People sometimes fake suicide, usually in order to escape legal, financial, or relationship difficulties and start a new life. In order to explain the absence of a body, it is common to fake suicide by drowning. The term ***pseudocide*** covers not only fake suicide, but other fake deaths too (primarily fake murder). There have been numerous cases of celebrity suicides that have been challenged as possible ***homicides***. Among the most famous were the drug overdose death of Marilyn Monroe, the 1994 suicide of Kurt Cobain, and the 1993 death of Vincent Foster, a deputy White House counsel.

Self-harm is not a suicide attempt, however initially self-injury was classified as a suicide attempt. There is a non-causal correlation between self-harm and suicide; both are most commonly a joint effect of depression. A common misconception is that self-injurers are suicidal. The reality is that self-injury is a completely different from suicide in that suicide attempts to end one's life whereas self-injury is a method to cope with life and continue living.

An individual who wishes to end their own life, but lacks the physical capacity to do so, may enlist the assistance of another person to help carry out the act on their behalf; frequently a family member or physician. This may or may not be considered a form of suicide according to different moral

views of the practice, with opponents regarding it instead as akin to murder. Assisted suicide is a contentious moral and political issue in many countries.

A suicide attack is when an attacker perpetrates an act of violence against others, typically to achieve a military or political goal that foreseeable results in his or her own death as well. Suicide bombings have been prominent in the news in recent years. Other historical examples include the assassination of Tsar Alexander II and the kamikaze attacks by Japanese air pilots during the Second World War.

DEFINITION OF SUICIDE

Suicide is neither an illness nor a condition. Rather, it's a complex set of behaviors that exists on a continuum, from ideas to actions.

For instance, someone you know may wish he or she were dead but never intend to act on those thoughts. They may think about suicide but not have a specific plan. On the other hand, they may have a very specific plan, with a date, location and method. Or they may have a plan as well as the intent and the means to carry it out.

Suicide: "The act of causing ones own death. Suicide may be positive or negative and it may be direct or indirect. Suicide is a positive act when one takes ones own life. "

"Suicide is a negative act when one does not do what is necessary to escape death such as leaving a burning building. "

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Suicide: "The act of suicide ends own death. Suicide may be passive or aggressive and it may be direct or indirect. Suicide is a positive act when one takes one's own life."

"Suicide is a negative act when one does not do what is necessary to escape death such as leaves one a burning building.

"Suicide is direct when one has the intention of causing ones own death, whether as an end to be attained, or as a means to another end, as when a man kills himself to escape condemnation, disgrace, ruin, etc."

Suicide is indirect (and not usually called suicide) when one does not desire it as an end or a means, but when one nevertheless commits an act which courts death, as in tending someone with SARS knowing that they may well succumb to the same illness.

MOTIVATIONAL FACTORS

Those who have ended their lives throughout history have done so for a variety of reasons, both conscious and unconscious, particularly among those suffering psychological distress. Suicide is often seen as a means to end suffering or pain, or shame.

- Altruistic/heroism. This is when someone voluntarily dies for the good of another or others. Examples include the Greek military at Thermopylae , Japanese kamikaze pilots, Buddhist monks and others who, starting in 1963, tried to stop the Vietnam war by burning themselves to death (self-immolation), and elderly people, who, feeling themselves to be a burden on their families, no longer wish to bring such strain upon them.
- Philosophy. Certain philosophical groups (e.g. existentialists and stoics) have advocated suicide under some circumstances.
- Religion. Often, this takes the form of martyrdom. It was common in Norse believers and in early Christianity.

- In order to escape from an unbearable situation. Examples are numerous, and "unbearable" is defined according to the person who must experience it. (Such as a criminal proceeding or torture by enemy(s))
- Psychiatric conditions, such as depression or schizophrenia. On the other hand, a person who has committed suicide is more likely to be classified as such, for the sole reason that they committed the act, which brings us back to a chicken-and-the-egg scenario.
- Romantic love or attraction (e.g. death or unattainability of the loved one). Although perhaps most celebrated among the young, as in Shakespeare's Romeo and Juliet, it is more common among elderly couples who have lived together for many years, after one of them dies.

Theories of the effects of age on suicide have changed over time. Initially, it was believed that across all demographic populations, suicides increased with age. However, new research indicates that while this is true for men, suicide rates in women rate peak around the age of 35, plateau and only decline past the age of 85.

Theories about the effects of social status on suicide rates are diverse. This is partly due to difficulty in quantifying social status. Some theorists believe that suicide rates increase in direct proportion to social status. Others believe that the inverse is true.

Suicide is more common among alcoholics, especially after loss of intimate relationships, such as the death of a spouse, divorce, loss of a friend and parental alienation. However, it is difficult to ascertain whether suicide

and experience of loss by an alcoholic are causally related, since no data regarding causal relationships between alcoholism itself and suicide exists.

Terminal illness has not been shown to be directly linked to higher suicide rates. Despite this, physical illness is found in nearly half of suicides.

On an individual level, the driving forces behind suicide vary across a range of themes. Common intentions behind suicidal actions include those of guilt, remorse, escapism and the provoking of guilt in those left behind. Media reports or local knowledge of a suicide can trigger copycat suicides in vulnerable people.

Evolutionists have developed several models to explain the apparent contradiction of suicide and evolutionary theory. Denys de Catanzaro has conducted a lot of research into this field. Others, such as Donald H. Rubinstein, and Anne Campbell have also done work in this field. The major difficulty for evolutionists is to explain why an organism would so deliberately harm its own potential reproductive capacity. Suicide seems to be perhaps the ultimate maladaptive trait, other than, perhaps, infanticide of one's own children.

De Catanzaro begins to explain suicide by saying that differential reproduction is in fact much more important to evolution than is "survival of the fittest." That is to say, that mere survival is not particularly important to passing on genes. Even if someone is short lived, but reproduces a lot, they are likely to have more descendants than someone who lives a long time but does not reproduce very much. The other factor in explaining from the evolutionary perspective is inclusive fitness. Since an individual will share

many genes with their relatives, it is in their evolutionary interest to ensure their relatives' survival and reproduction. More of their genes will be present in subsequent generations.

De Catanzaro believes that a general theory of suicide can be formed based on a calculation of the "costs of an individual's immediate death to the propagation of his or her genes." He developed a very complex equation that takes the various factors of the subject's potential reproduction, such as dependency of children, remaining reproductive potential, dependence on kin, and others, into account and is able to predict the subject's risk for suicide. Current research has been conducted mostly in the United States, with a large portion of the sample being young, educated, and religious.

According to de Catanzaro's variables, those at greatest risk of suicide include the elderly, especially those who are a burden on their family, anyone who is ostracized by their kin, someone unable to provide for their kin, dependent on their reproductively capable kin, or anyone who has difficulty relating with the opposite sex. All of these conditions will lead to emotional and psychological conditions that will make suicide more likely. De Catanzaro cites studies that show that emotions have a physiological basis to show that the self destructive response may be a natural, evolved response to their situation to ensure the continued propagation of one's genes.

According to this theory those mostly likely to kill themselves would be the elderly dependent on financially pressed children, or someone with little hope of reproducing who is also dependent of kin. Dr. de Catanzaro's theory can also be applied to general self preservation. It can be used to

predict how likely a mother or father is to sacrifice herself or himself to save their children, or other situations of that sort. De Catanzaro takes pains to recognize that his formula is only a base on which to predict likelihood of suicide or self sacrifice. He freely acknowledges that suicide is partially a learned behaviour, as is evidenced by the phenomenon of groupings of suicides occurring in short periods of time. He believes that there are many cultural phenomena that will affect any given individual. De Catanzaro also places strong emphasis on the fact that modern expressions of suicide may sometimes be unpredictable because we are in a different environment from that which we evolved in. He believes that there are many more suicides today than there would be in our "natural" environment due to stress and our confrontation with many situations that we have not been selected to deal with.

Another approach explains the differences between the sexes. One theory argues that men die of suicide more often than women because they do not value their lives as much as women. Since men are not essential to the survival of their offspring, and their potential for reproduction is much more varied, men have evolved to be less fearful of taking risks than women have. If a woman under natural conditions were to die, her children would most likely die as well. Therefore women have evolved to be more fearful of death and physical risk than men, and are therefore less likely to die of suicide. Under this theory suicide is just an expression of males' general willingness to take risks.

The means of achieving suicide varies and is greatly influenced by availability, perceived effectiveness and final bodily state. For example, in the United States, firearms are relatively easy to obtain and suicide by this method is four times more common than the next method.

The common means of suicide, roughly in order of use (U.S.), are by gunshot (the so-called "Hemingway solution"), asphyxia, hanging (there is often considerable overlap between hanging and asphyxia due to lack of expertise), drug overdose, carbon monoxide poisoning, jumping from height, stabbing or exsanguinations, and drowning.[3]

Physician-assisted suicide (see euthanasia) is typically by a lethal dosage of a prescription drug supplied by the physician. It may be taken orally, by intravenous drip, or infusion pump with a switch operated by the patient.

VIEWS ON SUICIDE

MEDICAL VIEW OF SUICIDE

Modern medicine treats suicide as a mental health issue. Overwhelming or persistent suicidal thoughts are considered a medical emergency. Medical professionals' advices that people who have expressed plans to kill themselves be encouraged to seek medical attention immediately. This is especially relevant if the means (weapons, drugs, or other methods) are available, or if the patient has crafted a detailed plan for executing the suicide. Medical personnel frequently receive special training to look for suicidal signs in patients. Individuals suffering from depression are considered a high-risk group for suicidal behavior. Suicide hotlines are

The mode of selecting suicide varies from country to country, influenced by availability, personal circumstances and local habits. For example, in the United States, firearms are so widely used in suicide and suicides by this method in that nation more common than the next method.

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Physician-assisted suicide (see euthanasia) is typically via a lethal dosage of a tranquilizing drug supplied by the physician at risk to him, orally, by intravenous drip, or otherwise passed, with consent, assisted by the patient.

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widely available for people seeking help. However, the negative and often too clinical reception that many suicidal people receive after relating their feelings to health professionals (e.g. threats of institutionalization, increased dosages of medication, the social stigma) may cause patients to remain more guarded about their mental health history or suicidal urges and ideation.

In the United States, individuals who express the intent to harm themselves are automatically determined to lack the present mental capacity to refuse treatment, and can be transported to the emergency department against their will. An emergency physician will determine whether inpatient care at a mental health care facility is warranted. This is sometimes referred to as being "committed". A court hearing may be held to determine the patient's competence.

CRIMINAL VIEWS OF SUICIDE

In some jurisdictions, an act or failed act of suicide is considered to be a crime. Some places consider failure to be attempted murder, with the victim being oneself, and will prosecute such offenders for attempted murder. More commonly, a surviving party member who assisted in the suicide attempt will face criminal charges.

In Brazil, suicide is not a crime, but willfully instigating or assisting in its completion is. If the help is directed to a minor, the penalty is applied in its double and not considered as homicide. In Italy and Canada, instigating another to suicide is also a criminal offence. In Singapore, assisting in the suicide of a mentally-handicapped person is a capital offense.

CULTURAL VIEWS OF SUICIDE

In the Warring States Period and the Edo period of Japan, samurai who disgraced their honor chose to end their own lives by seppuku, a method in which the samurai takes a sword and slices into his abdomen, causing a fatal injury. The cut is usually performed diagonally from the top corner of the samurai's writing hand, and has long been considered an honorable form of death (even when done to punish dishonor). Though such a wound would be fatal, seppuku was not always technically **suicide**, as the samurai's assistant (the kaishaku) would stand by to cut short any suffering by quickly administering decapitation, sometimes as soon as the first tiny incision into the abdomen was made.

Various human cultures may have views on suicide not directly or solely linked to one of the above religions

Chinese culture has taken an ambivalent view on suicide. It has been commonly mentioned throughout Chinese history and frequently tolerated, if not explicitly sanctioned. It is frequently used as a means of escaping tragedy and shame; ritual suicide is relatively common, particularly as a form of political protest.

Nonetheless, many moral systems dominant in traditional China prohibited or looked disfavorably upon suicide, including Buddhism and Confucianism. (*See also Chinese bioethics*) However, even in these cases, exceptions were often made.

Suicide has been closely tied with gender in Chinese culture, both historically and today. There are countless examples of females committing

suicide in pre-modern Chinese history, usually as a result of oppression or misfortune, such as family members (particularly husbands and mothers-in-law) looking upon them in condemnation, or when women fell into shame. In the latter cases, it was viewed as an honorable way to escape shame--especially because the repercussions of shame typically fell not merely on the individual, but to an immense degree upon the individual's extended family.

Today, suicide among females in China is at an extraordinarily high rate, reckoned to be the highest in the world. This typically occurs among poorly educated rural women. Because of the difficulties in transportation in the rural environment, women who attempt suicide are frequently successful in ending their lives because they cannot be brought to medical care early enough to be treated successfully. Some researchers, such as Canadian physician Michael Phillips have called to light this tragic phenomenon, and authorities in China are gradually awakening to the problem.

LEGAL VIEWS OF SUICIDE

Ironically, the punishment for attempted suicide in some jurisdictions has been death. In addition, suicide can have other legal consequences. For example, in the UK prior to 1961 their estate was forfeit.

The United Kingdom decriminalized suicide and attempted suicide in the Suicide Act 1961. By the early 1990s only two US states still listed suicide as a crime, and these have since removed that classification. Increasingly, the term commit suicide is being consciously avoided, as it

implies that suicide is a crime by equating it with other acts that are committed, such as murder or burglary.

In many jurisdictions it is a crime to assist others, directly or indirectly, to take their own life. Sometimes an exception applies for physician assisted suicide (PAS), under strict conditions; see Euthanasia.

In the Netherlands, being present and giving moral support during someone's suicide is not a crime; neither is supplying general information on suicide techniques. However, it is a crime to participate in the preparation for or execution of a suicide, including supplying lethal means or instruction in their use. (Euthanasia may be an exception. See Euthanasia in The Netherlands.)

RELIGIOUS VIEWS OF SUICIDE

HINDUISM

In Hinduism, murdering one's own body is considered equally sinful as murdering another. However, under various circumstances it is considered acceptable to end one's life by fasting. This practice, known as prayopavesha, requires so much time and willpower that there is no danger of acting on an impulse. It also allows time for the individual to settle all worldly affairs, to ponder life and to draw close to God. It can also be argued that Hinduism is a more of a religious umbrella than a religion in itself, and that some Hindus would (not incorrectly) hold the belief that suicide was allowed by Hinduism.

ISLAM

Like other Abrahamic religions, Islam views suicide strictly as sinful and detrimental to one's spiritual journey. However, human beings are said to be liable to making mistakes, thus, Allah (God) forgives the sins and wipes them out if the individual is truly sincere in repentance, true to the causes and determined in intention.

For those who believed, but eventually disbelieved in God in the end, the result seems unambiguously negative. In the Qur'an, the holy book for Muslims, although Allah (God) is said to be 'the Most Merciful, the Most Kind' and forgives all sins, the great sin of unbelief is deemed unforgivable. According to the Sunnah (life and way of the Prophet Muhammad), any person who dies by suicide and shows no regret for his wrongdoing will spend an eternity in hell, re-enacting the act by which he took his own life. Some Islamic jurists hold the interpretation that hell is not eternal but indefinite and only remains to exist while the earth endures at its present state. Once the Day of Recompense passes, Hell will eventually be emptied.

BUDDHISM

According to Buddhism, our past heavily influences our present. Correspondingly, what one does in the present influences his or her future, in this life or the next. This is cause and effect as taught by Gautama Buddha. Otherwise known as karma, intentional action by mind, body or speech has a reaction. This reaction, or repercussion, is the cause of conditions and differences we come across in the world.

One's suffering primarily originates from past negative deeds or just from being in samsara (the cycle of birth and death). Another reason for the prevalent suffering we experience is impermanence. Since everything is in a constant state of flux, we experience dissatisfaction with the fleeting events of life. To break out of samsara, one simply must realize his or her true nature by Enlightenment in the present moment; this is Nirvana.

For Buddhists, since the first precept is to refrain from the destruction of life, including oneself, suicide is clearly considered a negative form of action. Despite this view, an ancient Asian ideology similar to seppuku (*hara-kiri*) continues to influence oppressed Buddhists to choose the act of "honorable" suicide. The most well-known instance of this was Thich Quang Duc's suicide by self-immolation to protest the government of Ngo Dinh Diem. Also in modern times, Tibetan monks have used this perceived ideal to protest the Chinese occupation of Tibet and China's human rights violations against Tibetans.

CHRISTIANITY

EARLY CHRISTIANITY

Early Christianity was attracted to death insofar as martyrdom was often something they felt called upon by their faith to permit if the occasion arose. In the eyes of some the act was often indistinguishable from martyrdom. Even the death of Jesus can be considered a kind of suicide, by some, such as Tertullian, an early Father of the Church. There were seven suicides in the Old Testament, none of which were criticized in that document. In Matthew 27:3, the suicide of Judas Iscariot, who betrayed

Jesus, seems to be condoned, as a sign of his repentance or at least the recognition of his guilt.

The most notable pro-suicide Christian group was the Donatists, who believed that by killing themselves they could attain martyrdom and go to heaven. They jumped off cliffs, burned themselves in large numbers, and stopped travelers, either offering to pay them or threatening them with death to encourage them to kill the supposed Donatist martyr. They were eventually declared heretics.

As Christianity became the dominant religion of the Roman Empire, however, its views on suicide changed, gradually. In the sixth century, suicide became a religious sin and secular crime. In 533, those who committed suicide while accused of a crime were denied a Christian burial, which was a requirement for going to heaven. In 562, all suicides, regardless of circumstances or reason, were punished in this way. In 693, even the attempt of suicide became an ecclesiastical crime, which could be punished by excommunication, with civil consequences following.

In the fifth century, St. Augustine wrote the book "The City of God", in it making Christianity's first overall condemnation of suicide. His biblical justification for this was his novel interpretation of the commandment, "thou shalt not kill", and the rest of his reasons were taken from Plato's "Phaedra". Although this was a humanitarian opposition, Christianity ended up persecuting suicides, degrading their bodies (sometimes by being buried at crossroads with a stake through their body), defaming their memories, and persecuting their families.

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Some have stated that "the church now considers Judas's suicide to be a greater sin than his betrayal of Christ."

Many Christians believe in the sanctity of human life, seeing it as a creation of God and obliging every effort be made to preserve it whenever possible.

It was not until about a thousand years after St. Augustine that Christians again questioned suicide. Thus, even while believing that suicide is generally wrong, liberal Christians may hold that people who choose suicide are severely distressed and that the loving God of Christianity can forgive such an act.

CATHOLICISM

In Catholicism, suicide has been considered a grave and mortal sin. The chief Catholic argument is that one's life is the property of God, and to destroy that life is to wrongly assert dominion over what is God's. This argument runs into a famous counter-argument by David Hume, who held that if it is wrong to take life when a person would naturally live, it must be wrong to save life when a person would naturally die, as this too seems to be contravening God's will. Some mitigation of this contrast may exist when examining the Catholic doctrine of extraordinary means : the Catholic Church teaches that there is no moral obligation for a person to chose extraordinary methods of saving one's life in the face of possible death.

The 1997 Catechism of the Catholic Church indicates that suicide may not always be fully conscious -- and thus not one-hundred-percent morally culpable: "*Grave psychological* disturbances, anguish, or grave fear of

Some have stated that "the compassionate doctor's [illegible] would be a murderer and then [illegible]"

Many Christians believe in the sanctity of human life, [illegible] creation of God and [illegible] whenever possible.

It was not until about a thousand years after St. [illegible] that Christians [illegible] is generally wrong. [illegible] suicide are [illegible] for [illegible].

CATHOLICISM

The Catholic [illegible] suicide has been [illegible]. The chief Catholic argument is that life is a gift [illegible] of God, and [illegible] destroy this life is to [illegible] over what is God's. This argument, [illegible] that if it is wrong to take the life [illegible] it must be wrong to save life when a person would [illegible] with [illegible] of this [illegible] when examining the Catholic doctrine of [illegible]. The Catholic Church teaches that there is no moral obligation for a person to use extraordinary methods of saving [illegible] in the face of [illegible] death.

The [illegible] of the Catholic Church indicates that suicide may [illegible] — and that [illegible] persons [illegible] morally culpable. [illegible]

hardship, suffering, or torture can diminish the responsibility of the one committing suicide."

MODERN CONSERVATIVE CHRISTIANITY

Conservative Christians (Evangelicals, Charismatics and Pentecostals) have often argued that because suicide involves self-murder, anyone who commits this sin goes to Hell.

Despite this, a small minority of Muslim scholars take the view that actions taken in the course of jihad where one's own death is assured (e.g. suicide bombing) are not considered suicide. Such acts are instead considered a form of martyrdom. There is Quranic evidence to the contrary, stating those involved in the killing of the innocent are wrongdoers and transgressors. Nevertheless, many claim Islam does permit the use of suicide - though only against the unjust and oppressors - if one feels there is absolutely no other option available and life otherwise would end in death.

JUDAISM

Judaism views suicide as one of the most serious of sins. Suicide has always been forbidden by Jewish law in all cases. It is not seen as an acceptable alternative even if one is being forced to commit certain cardinal sins for which one must give up one's life rather than sin. Assisting in suicide and requesting such assistance (thereby creating an accomplice to a sinful act) is also forbidden, a minimal violation of Leviticus 19:14, "Do not put a stumbling block before the blind," for the Rabbis interpreted that verse to prohibit any type of stumbling block: theological (e.g. persuading people to believe in false doctrine), economic (e.g. giving bad financial advice) or in

this case moral stumbling blocks, as well as physical ones (see Talmud Bavli (B.) Pesah.im 22b; B. Mo'ed Katan 5a, 17a; B. Bava Mezia 75b. and B. Nedarim 42b)

The prohibition against suicide is not recorded in the Talmud. The post-talmudic tractate Semahot (Evel Rabbati) 2:1-5 serves as the basis for most of later Jewish law on suicide, together with Genesis Rabbah 34:13, which bases the biblical prohibition on Genesis 9:5 "And surely your blood of your lives will I require." Cf. M.T. Laws of Murder 2:3; Babylonian Talmud tractate Laws of Courts (Sanhedrin) 18:6; S.A. Yoreh De'ah (Code of Jewish Law) 345:1ff.

The Committee on Jewish Law and Standards, the body of scholars of Jewish law in Conservative Judaism, has published a Teshuva on suicide and assisted suicide in the Summer 1998 issue of *Conservative Judaism,* Vol. L, No. 4. It affirms the prohibition, then addresses the growing trend of Americans and Europeans to seek assistance with suicide. The Conservative Teshuva notes that while many people get sick, often with terminal illnesses, most people don't try to kill themselves. The committee believes we are obligated to determine why some seek help with suicide and to ameliorate those circumstances.

The **Conservative response** states: "...those who commit suicide and those who aid others in doing so act out of a plethora of motives. Some of these reasons are less than noble, involving, for example, children's desires to see Mom or Dad die with dispatch so as not to squander their inheritance

on 'futile' health care, or the desire of insurance companies to spend as little money as possible on the terminally ill."

The paper says the proper response to severe pain is not suicide, but better pain control and more pain medication. Many doctors, it asserts, are deliberately keeping such patients in pain by refusing to administer sufficient pain medications: some out of ignorance; others to avoid possible drug addiction; others from a misguided sense of stoicism. Conservative Judaism holds that such forms of reasoning are "bizarre" and cruel, that with today's medications there is no reason for people to be in perpetual torture. It then investigates the psychological roots of hopelessness felt by some patients, and asserts: "Physicians or others asked to assist in dying should recognize that people contemplating suicide are often alone, without anyone taking an interest in their continued living. Rather than assist the patient in dying, the proper response to such circumstances is to provide the patient with a group of people who clearly and repeatedly reaffirm their interest in the patient's continued life... Requests to die, then, must be evaluated in the terms of degree of social support the patient has, for such requests are often withdrawn as soon as someone shows an interest in the patient staying alive. In this age of individualism and broken and scattered families, and in the antiseptic environment of hospitals where dying people usually find themselves, the mitzvah of visiting the sick (*bikkur Holim*) becomes all the more crucial in sustaining the will to live."

SUICIDE IN HISTORY

Among the famous people who have died by suicide are Boudicca, Kurt Cobain, Cleopatra VII of Egypt, Hannibal, Nero, Adolf Hitler, Mark Antony, Ernest Hemingway, Alan Turing, Sylvia Plath, Marina Tsvetaeva, Yukio Mishima, Marilyn Monroe, Hunter S. Thompson, and Vincent van Gogh.

IN THE MILITARY

In ancient times, suicide sometimes followed defeat in battle, to avoid capture and possible subsequent torture, mutilation, or enslavement by the enemy. The Caesarean assassins Brutus and Cassius, for example, killed themselves after their defeat at the battle of Philippi. Insurgent Jews died in a mass suicide at Masada in 74 CE rather than face enslavement by the Romans.

In Roman society, suicide was an accepted means by which honor could be preserved. Those charged with capital crimes, for example, could prevent confiscation of their family's estate by taking their own lives before being convicted in court. It was sardonically said of the emperor Domitian that his way of showing mercy was to allow a condemned man to take his own life.

During World War II, Japanese units would often fight to the last man rather than surrender. Towards the end of the war, the Japanese navy sent kamikaze pilots to attack Allied ships. These tactics reflect the influence of the samurai warrior culture, where seppuku was often required after a loss of honor. It is also suggested that the Japanese treated Allied POWs harshly

because, in Japanese eyes, by surrendering rather than fighting to the last man, these soldiers showed they were not worthy of honorable treatment.

Spies have carried suicide pills or pins to use when captured, partly to avoid the misery of captivity, but also to avoid being forced to disclose secrets. For the latter reason, spies may even have orders to kill themselves if captured - for example, Gary Powers had a suicide pin, but did not use it when he was captured.

The Kaiowas tribe in the South American rainforest committed a mass suicide in protest of a government that was taking away their land and beliefs.

IN PHILOSOPHY

In the late 18th century, Goethe's *Die Leiden des jungen Werthers*, ("The Sorrows of Young Werther"), the romantic story of a young man who kills himself because his love proves unattainable, was reputed to have caused a wave of suicides in Germany.

Arthur Schopenhauer would be expected to take the subject seriously, due to his bleak view of life. His main work - *The World as Will and Representation* - constantly uses the act in its examples. He denied that suicide was immoral and saw it as one's right to take their life. In an interesting allegory, he compared ending one's life, when under great suffering, to waking up from sleep, when experiencing a terrible nightmare. However, most suicides were seen as an act of the will, as it takes place when one denies life's pains and is thus different from ascetic renunciation of the will, which denies life's pleasures. His ideas become confused when he

talks about ascetic suicides; in one part, he claims that ascetic suicide can only occur through starvation, whilst, in another part, he talks of how ascetics have fed themselves to crocodiles and been buried alive. This seems somewhat contradictory - but it is clear that, all in all, Schopenhauer had a lot of sympathy for those who commit suicide.

David Hume left an essay on suicide to be published after his death. Most of it is concerned with the idea that it is an affront to God. He argued that it was no more a rebellion against God than to save the life of someone who would otherwise die or to change anything else in the environment's position. He spent much less time dismissing arguments that it was an affront to duty to others or to oneself. He said that it could be compared to retiring from society and becoming a total recluse, which is not normally considered to be immoral - although this comparison of his would not seem to justify a suicide that left children or dependents vulnerable, in its wake. As for duty to self, he saw it as obvious that there would be times when it would be desirable not to continue living and thought it ridiculous that anyone would consider suicide unless they had considered every other option first.

Emile Durkheim, the founder of sociology, wrote a very famous study of suicide in the late 1800s.

G.K. Chesterton called suicide "the ultimate and absolute evil, the refusal to take an interest in existence." He argued that a person who killed himself, as far as they were concerned, destroyed the entire world.

Albert Camus saw the goal of existentialism in establishing whether suicide was necessary in a world without God.

A study of suicide in literature was written by the poet Al Alvarez, entitled *The Savage God*.

Jean Améry, in his book *On Suicide: a Discourse on Voluntary Death* (originally published in German in 1976), provides a moving insight into the suicidal mind. He argues forcefully and almost romantically that suicide represents the ultimate freedom of humanity, attempting to justify the act with phrases such as "we only arrive at ourselves in a freely chosen death", lamenting the "ridiculously everyday life and its alienation". He killed himself in 1978.

William Godwin showed his extreme optimism by stating that suicide was almost always a mistake, as more pleasure is to be gained by living. As he was a utilitarian, who saw moral judgements as based on the pleasure and pain they produced, he thus thought suicide to be immoral.

Ulrike Meinhof wrote that "suicide is the ultimate form of protest." In this she saw suicide as a political act, as a last resort to preserve one's sovereignty over one's body and life. She later died by suicide while under captivity (as did several of her Red Army Faction comrades). Among the most typical methods of suicide as a part of political action have been death by fire and hunger strike.

ARGUMENTS FOR SUICIDE VIEWS

In contrast to the views above, there are also arguments in favor of allowing an individual to choose between life and suicide. This view sees suicide as a valid option.

This line rejects the widespread belief that suicide is always or usually irrational, saying instead that it is a genuine, albeit severe, solution to real problems -- a line of last resort that can legitimately be taken when the alternative is considered worse. No being should be made to suffer unnecessarily, and suicide provides an escape from suffering.

Furthermore, the pro-choice position asserts, in the spirit of liberalism, that a person's life belongs only to him or her, and nobody should try to force on someone their own view that life must be lived. Rather, only the individual involved can make such an important decision, and whatever decision he or she does make, it should be respected. See also free will.

To go further some such as Thomas Szasz would argue that suicide is the most basic right of all. If freedom is self-ownership, ownership over one's own life and body, then the right to end that life is the most basic of all. If others can force you to live, you don't own yourself, and belong to them.

ARGUMENTS AGAINST SUICIDE

It is important to note that the liberal view above is not associated with classical liberalism; John Stuart Mill, for instance, argued in his influential essay On Liberty that since the sine qua non of liberty is the power of the individual to make choices, any choice that one might make that would

deprive him or her of the ability to make further choices should be prevented. Thus, for Mill, selling oneself into slavery or killing oneself should be prevented, in order to avoid precluding the ability to make further choices. Concerning these matters, Mill writes in On Liberty:

> Not only persons are not held to engagements which violate the rights of third parties, but it is sometimes considered a sufficient reason for releasing them from an engagement, that it is injurious to them-selves. In this and most other civilized countries, for example, an engagement by which a person should sell himself, or allow himself to be sold, as a slave, would be null and void; neither enforced by law nor by opinion. The ground for thus limiting his power of voluntarily disposing of his own lot in life, is apparent, and is very clearly seen in this extreme case. The reason for not interfering, unless for the sake of others, with a person's voluntary acts, is consideration for his liberty. His voluntary choice is evidence that what he so chooses is desirable, or at the least endurable, to him, and his good is on the whole best provided for by allowing him to take his own means of pursuing it. But by selling himself for a slave, he abdicates his liberty; he foregoes any future use of it, beyond that single act. He therefore defeats, in his own case, the very purpose which is the justification of allowing him to dispose of himself. He is no longer free; but is henceforth in a position which has no longer the presumption in its favor, that would be afforded by his voluntarily remaining in it. The principle of freedom cannot require that he should be free not to be free. It is not freedom, to be allowed to alienate his freedom.

Philosophical thinking in the 19th and 20th century has led, in some cases, beyond thinking in terms of pro-choice, to the point that suicide is no longer a last resort, or even something that one must justify, but something that one must justify not doing. Existentialist thinking essentially begins with the premise that life is objectively meaningless, and then poses the question "why not just kill oneself?" It then proceeds to answer this by suggesting the individual has the power to give personal meaning. Nihilist thinkers reject this emphasis on the power of the individual to create meaning, and acknowledge that all things are equally meaningless, including suicide.

COMBINATION OF MURDER AND SUICIDE

The combination of murder and suicide can take various forms, including:

1. Suicide to facilitate murder, as in suicide bombing
2. Suicide after murder to escape punishment, e.g. Dunblane Massacre, Columbine High School massacre.
3. Having a combined objective of suicide and murder
4. Suicide after murder as a form of self-punishment due to guilt
5. Considering one's suicide as the main act, but murdering e.g. one's children first, to avoid their becoming orphans, and to be together in an expected afterlife
6. Joint suicide in the form of killing the other with consent, and then killing oneself

SUICIDE IN INDIA

The Dharmashastras (book on the codes of living in ancient India) are explicit in their condemnation of suicide. For instance, Yama Smriti (600 BC) says that the bodies of those who die by suicide should be defiled. If a person survived an attempt, he/she should pay a fine and if the person killed him/herself, the sons or friends should pay the fine. Although suicide was condemned in The Dharmashastras, there is also a chapter on allowed suicides. Scriptures, such as by Manu and Kautilya, were against suicide. These sentiments were echoed for ages in India. Even today, attempted suicide is a crime under the Indian Penal Code, although the neighboring country of Sri Lanka has removed attempted suicide as a punishable offence. Assisting and abetting suicide is also a punishable offence in India.

Suicide in India has been steadily rising since 1967, the year from when the National Crime Records Bureau [NCRB] has been maintaining records of accidental and suicidal deaths. The statistics of suicides in the country are staggering – 6 to 9/100,000 in late 1970's ; 12/100,000 in late 1980's ; 9.73/100,000 in 1990's ; 10.03/100,000 in 1997. Kerala is placed highest in the list of "highly suicide prone states" category. It is reposted that 29.3 per one lack population committed suicide in Kerala as against the national average of 10.8 per one lack in 1998 ; in 1999, 2000 and 2001 number of reported suicide in Kerala is 9314, 9080 and 10161 respectively.

Suicide rates in India have shown a gradually increasing trend. The rate in 1999 was 11.2 per 100,000(Accidental Deaths and Suicide in India 1999, published by National Crime Record Bearue (NCRB), Ministry of

Home Affairs, Govt. of India). The striking aspect of Indian data is the large variation in different parts of India. States and cities with rapid social change are associated with higher suicide rates, such as the states of Kerala and Tripura, and cities like Pondicherry and Bangalore. The important association is alcohol dependence as a direct or indirect cause of suicide.

Recent data from India (national Crime Research Bureau 2000) reveal that in the year 2000, 101 families (624 persons) committed suicide involving 170 males, 234 females and 225 children. Majority of them (n = 593) occurred in the rural areas. It is clear that women outnumber men in suicide pacts. In individual suicides psychopathology is an important risk factor whereas in suicide pacts social stressors like non-acceptance of love marriage, dowry and financial problems are the crucial risk factors. Suicide pacts are thus more due to social reasons and can be viewed as a form of protest against archaic norms and expectations.

OBJECTIVE OF THE STUDY

On the basis of above mentioned problem following objective was framed:

- To visualize the effect of Pranayama on aged persons in relation to suicide ideation.

CHAPTER - 2

REVIEW

Of

LITERATURE

CHAPTER-2

REVIEW OF LITERATURE

Many researches have been conducted in this area. Some of them are following.

SUICIDE IDEATION

Law S. and Liu P. (2008) examined suicide in China reveals several unique findings: (1) female suicides outnumber male suicides by a 3:1 ratio; (2) rural suicides outnumber urban suicides by a 3:1 ratio; (3) a large upsurge of young adult and older adult suicides has occurred; (4) a comparatively high national suicide rate two to three times the global average is evident; and, most startlingly, (5) a low rate of psychiatric illness, particularly depression, exists in suicide victims. The strongest empirical data suggest that these trends result from a high number of rural, young females who experience acute interpersonal or financial crises and then impulsively attempt suicide using lethal pesticides or poisons. Other suicide risk factors in China are similar to those that are well known internationally. Interactive sociological, cultural, and economic hypotheses unique to China provide further insight. Among those, the cultural-socioeconomic

disadvantages of the Chinese rural female and cultural attitudes toward suicide are particularly noteworthy.

Mann J. and Currier D. (2008) found an estimated 877,000 lives were lost through suicide worldwide in 2002. In the United States, in 2003, more than 31,000 individuals died by suicide, making it the 11th leading cause of death. Men are four times more likely than women to die by suicide, however women make more nonfatal suicide attempts than men. There are many contributory factors to suicide and suicide attempts, the most important of which is having psychiatric disorder. More than 90% of suicides have a diagnosable psychiatric disorder at the time of their death, the most common being mood disorders. Other disorders with increased risk for suicidal behavior are psychotic disorders, alcohol and substance use disorders, and personality disorders, particularly Cluster B personality disorders. Other risk factors for suicide and suicide attempt include a family history of suicide and suicide attempt, a history of previous suicidal behavior, aggressive/impulsive traits, hopelessness and pessimism, a history of childhood abuse, head injury, and access to lethal means such as firearms. Assessing a suicidal patient involves evaluating current stressors as well as assessing enduring risk factors and indicators that an individual has a propensity to engage in suicidal behavior when under stress. Stressors include current life events or an episode of psychiatric illness, particularly a depressive episode. Longer-term risk factors include aggressive and impulsive traits, trait pessimism, and a history of past suicidal behavior

because it indicates a predisposition to suicidal acts. Individuals who present with severe suicidal ideation, a definite plan for suicide, and who have ready access to lethal means are at high risk and require immediate intervention, up to and including hospitalization. Long-term treatment strategies should also include addressing enduring risk factors.

Kim H. S. and Kim H. S. (2008) examined the rate of suicide attempts and relevant variables and identified risk factors for suicide attempts among Korean adolescents. A cross-sectional study was performed using an anonymous, self-report questionnaire. A total of 2,100 Korean adolescents, including 1,321 student adolescents and 779 delinquent adolescents, were selected using a proportional stratified random sampling method for this study. The results showed the rate of suicide attempts to be 11.6%, with delinquent adolescents reporting a higher rate of suicide attempts than student adolescents. Adolescent suicide attempts indicated higher levels of dysfunctional family dynamics and maladaptive personalities. In addition, adolescents who attempted suicide expressed a significantly lower level of life satisfaction and less effective coping strategies compared with those adolescents who had not attempted suicide. Logistic regression analysis revealed that five predictive risk factors appeared to be statistically significant: coping strategy, parental child-rearing pattern, depression, parent-child relationship, and psychosomatic symptoms, in this order at $p < 0.05$.

Hidaka Y., Operario D., and et al. (2008) assessed prevalence of attempted suicide and explored individual, interpersonal, behavioral, and psychological risk factors associated with attempted suicide in a general community sample of youth in a metropolitan Japanese city. Survey of 2,095 participants age between 15 and 24 who were recruited using street-intercept techniques. Overall, 6% of males and 11% of females reported a prior suicide attempt. For males, attempted suicide was independently associated with experience of school bullying, being homosexual or bisexual, history of drug use, experience of unwanted sex, history of a diagnosed sexually transmitted infection, and low self-esteem. For females, attempted suicide was independently associated with being younger (ages 15–19 compared to 20–24), experience of school bullying, history of drug use, and history of smoking.

Leary C. E. and et. al. (2008) discussed the Childhood experiences of physical punishment were examined as related to perceptions of family environment during childhood and affective and personality outcomes of college students. From the 274 respondents who participated, scores were compared for the participants with the 75 highest and 75 lowest physical discipline scores based on the Conflict Tactics Scale (CTSPC-CA). Respondents who experienced the highest level of physical punishment in their families of origin reported higher family conflict, more negative parental relationships, greater family worries, more depressive symptoms, more perceived nonsupport, greater identity problems, and more negative social relationships. Respondents in the low physical punishment group

reported higher positive family affect. Results suggest that experiencing physical discipline as a child may be related to one's family environment and psychological well-being in young adulthood.

Mark E. and at al (2007) discussed the potential role of shame and guilt in both the causes and consequences of suicide. Theory and emerging empirical research indicates that feelings of shame are more prominent than guilt in the dynamics leading up to suicidal thoughts and behaviors. Nonetheless, experiences of shame often go unnoticed by both client and therapist in the therapeutic session (Lewis, 1971). Treatment of suicidal clients may be enhanced to the extent that therapists and other mental health professionals develop a 'third ear' for subtle markers of hidden shame experiences. The importance of considering shame and guilt in connection with suicide extends to the 'survivors' of suicide, as well. Although often overlooked, friends and family members are also vulnerable to experiences d shame and/or guilt in the aftermath of a loved one's suicide. Therapists, too, often experience similar emotional reactions that may be exacerbated by concerns Unique to their professional role as treatment providers.

Elizabeth M. and Bertera E. M. (2007) examined the role of positive and negative social exchanges between adolescents, their peers and family as predictors of suicide ideation was investigated in a national random sample of 1591 adolescents from the US National Comorbidity Survey. Four indexes measured socio-emotional exchanges by type (positive or negative) and by source (family or peers). Negative exchanges with family were associated with increased suicide ideation scores in younger (15–17) but not

in older (18–19) adolescents. Positive support provided as significant buffering effect that was age-specific and independent of gender, income or mood disorders. Providers, especially social workers need to identify both positive and negative exchanges that adolescents experience with family and peers.

Tanuj S., and Shivananda J. (2006) investigated suicidal ideation and suicide attempt are generally considered as non-fatal suicidal behaviors (NFSB) by most researchers. Across different cultures, the prevalence of NFSB has been found to be alarmingly high among adolescents. As there is no published study estimating prevalence rates in India, we conducted a study on adolescents in Delhi to find prevalence of NFSB and other related behaviors and to identify risk factors for NFSB. Prevalence of suicidal ideation (lifetime), suicidal ideation (last year), suicide attempt (lifetime), suicide attempt (last year) were 21.7%, 11.7%, 8% and 3.5%, respectively. All the significant variables were entered into a logistic regression analysis model, and the adjusted odds ratios, with 95% confidence intervals, were obtained for them. Hindu religion, female sex, older adolescent, physical abuse by parents, feeling neglected by parents, history of running away from school, history of suicide by a friend, death wish and DSH were found to be significant risk factors for NFSB.

Shahar G. and at al (2006) examined despite voluminous research on the role of hopelessness and depression in suicidality, a systematic examination of various causal models pertaining to these variables is conspicuous in its absence. Structural Equation Modeling (SEM) analyses revealed

synchronous, but not longitudinal, associations between hopelessness, depressive symptoms, and suicidal ideation.

Rachel C. F. Sun and Eadaoin K. P. Hui (2006) aimed to investigate the family, school, peer and psychological factors that contribute to adolescent suicidal ideation. The participants were 1,358 (680 boys and 678 girls) Hong Kong Chinese adolescents who were divided into younger (12.3 years, n=694) and older (15.4 years, n=664) age groups. By using structural equation modeling, the results showed that family cohesion and sense of school belonging were the core predictors of self-esteem and depression, and that depression was a strong mediator of suicidal ideation. In the prediction of suicidal ideation, peer support was significant among girls and younger adolescents only, whereas peer conflict was significant among older adolescents only. Family conflict, teacher support and academic pressure did not show any significant contribution in the prediction. The implications for future research and positive youth development programs are discussed.

Judd F. and at al (2006) used a combination of quantitative and qualitative approaches. First, using self-report questionnaire data, we compared rates of mental health problems (a common correlate of suicide) and a number of personality measures between farmers (n=371) and non-farming rural residents (n=380). In addition, semi-structured interviews with farmers (n=32) were used to gain a richer understanding of how the context of farming and mental health interact. Five key findings emerged from the study. First, in the quantitative study, we found no support for the

proposition that farmers experience higher rates of mental health problems than do non-farmer rural residents, but we identified potentially important personality differences between farmers and non-farmers, with levels of conscientiousness being significantly higher amongst farmers and levels of neuroticism being significantly lower. A strong association between maleness and farming was also found. In the qualitative study, participants indicated that farming is an environment in which individuals experienced a range of stressors but have limited capacity to acknowledge or express these. In addition, there appeared to be significant attitudinal barriers to seeking help for those who may have mental health problems, particularly male farmers.

Mofidi N., Ghazinour M., and et. al. (2006) examined attitudes towards suicide represent a key stage in the pathway leading to suicide. A deeper understanding of the social, psychological and treatment-related factors influencing the development of attitudes towards suicide could guide suicide prevention strategies especially in a neglected population like Kurds. In a cross-sectional study in Iranian Kurdistan, 1,000 households participated in the investigation from April to May 2006 selected by a cluster random sampling process. A questionnaire on attitudes towards suicide (ATTS) was used to measure suicide related attitudes and thoughts. Suicide related experiences were more often reported from the wider social network (relative, friends, acquaintances) than from family members. There is a significant accumulation of suicide related experiences when a related event

was reported in the close family. The level of suicide related attitudes is related to age, gender, marital status, level of education and employment status.

Gençöz T. and Or P. (2006) studied underline the importance of family environment as a significant associate of suicide probability among university students. For this aim 226 Turkish university students completed Suicide Probability Scale, Family Environment Questionnaire, Beck Depression Inventory, and Positive and Negative Affect Scale. As a result of the formulated regression analysis, after controlling for the 51% of the total variance accounted for by the control variables (i.e., gender, age, living with family versus away from family, and Grade Point Averages) and mood related variables (i.e., depressive symptoms, and positive and negative affect), family cohesion still emerged as a significant associate of the suicide probability. These findings underline the importance of family relations as a risk factor of suicide among university students.

Liu R. X. (2006) examined whether severity of depression reduces or intensifies the relationship between friends' suicide attempt and adolescent's own attempt to commit suicide, and whether there are gender differences in this interrelationship. Using logistic regression and data from a nationally representative sample of adolescents studied at 2 points in time, this study yielded significant findings. First, friends' suicide attempt and adolescent depression each predicts adolescent's own attempt to commit suicide, and these effects are similar for both boys and girls. Second, highly depressed adolescents are less likely than low- or non-depressed adolescents to attempt

suicide when their friends attempt suicide, and this relationship is observed mainly among adolescent boys. Finally, for adolescent girls, depression reduces the relationship between friends' suicidal attempt and adolescent's own attempt but this effect is not statistically significant. These results are discussed in light of their theoretical importance and policy implications.

Hunt K. and at al (2006) investigated whether gender role orientation (masculinity and femininity scores) and gender role attitudes were related to the reporting of serious suicidal thoughts in three generations (early adulthood, and early and late middle age) in a community sample The prevalence of serious suicidal thoughts was higher in early adulthood (10% men, 15% women) than in early (4% men, 8% women) and late (6% men, 5% women) middle age. In early adulthood only sex was significantly related to suicidal thoughts, with women at higher risk (adjusted OR 1.74, 95% CI 1.01–3.00). In early middle age masculinity scores were negatively related to suicidal thoughts (adjusted OR for each unit increase in score 0.65: 95% CI 0.46–0.93), and more traditional views on gender roles were positively associated with suicidal thoughts (adjusted OR 1.48: 95% CI 1.07–2.04). In late middle age trends were in the same direction as in early middle age, but were not statistically significant. Femininity scores were unrelated to serious suicidal thoughts at any age.

Evans W. P., Owens P. and Marsh S. C. (2005) seeked to better understand possible relationships between environmental factors, locus of control, and suicide risk among adolescents. The data derive from in-school surveys of eight-grade students conducted in 1998 and 1999 in Arizona,

California, Nevada, and Wyoming. Results revealed higher levels of suicide risk were associated with a more external locus of control orientation. Relationships between suicide risk and several environmental factors and preferences also were found. Potential links between locus of control, environment, and suicide risk are discussed, as are implications for intervention efforts and future research.

Middleton N. and at al (2004) examined there is growing evidence that areas characterized by high levels of social fragmentation have higher suicide rates. Previous ecological studies have focused on relatively large geographic areas and/or examined associations in all age groups combined. Indicators of social fragmentation (e. g. proportion of people living alone or population mobility) were most consistently associated with suicide risk. For example, across quartiles of wards ranked according to increasing proportions of single-person households, age- and sex-adjusted suicide rate ratios were: 1.00, 1.05 (1.00, 1.11), 1.14 (1.08, 1.19) and 1.42 (1.36, 1.49). Associations were strongest in 15 to 44 and 45 to 64 year-olds. Associations with social fragmentation persisted after controlling for the effect of other area characteristics.

Turner S. G., Kaplan C. P. (2004) found in an important study that epidemiological data show high rates of suicide attempts among adolescent Latinas. Few studies have addressed the psychosocial, cultural and family correlates of suicide attempts among this age group of a rapidly growing population. The authors studied 31 adolescent Hispanic females who were receiving mental health services; 14 girls had attempted suicide in the

previous five years and 17 had never attempted suicide. The two groups of girls did not differ significantly with respect to demographic profiles, levels of depression, family type, acculturation, or self-esteem. However, as hypothesized, the mutuality between girls and their mothers was lower among suicide attempters. Maladaptive coping skills of withdrawal and wishful thinking were more commonly used by attempters, and non-attempters used emotional regulation and problem-solving more frequently. Findings are discussed within the context of the empirical and theoretical literature and implications for practice are considered.

Gunnell, D. and et. al. (2004) stated that there is growing evidence that areas characterized by high levels of social fragmentation have higher suicide rates. Previous ecological studies have focused on relatively large geographic areas and/or examined associations in all age groups combined. Negative binominal regression was used to assess age- and sex-specific suicide rate ratios for a range of census-derived indicators of the social, health and economic characteristics of small areas (mean population aged 15) in England and Wales. Results indicators of social fragmentation (e. g. proportion of people living alone or population mobility) were most consistently associated with suicide risk. Associations were strongest in 15 to 44 and 45 to 64 year-olds. Associations with social fragmentation persisted after controlling for the effect of other area characteristics. Targeted mental health promotion and social policy initiatives to reduce area-health inequalities in suicide might usefully focus on areas with high levels of social fragmentation.

Kung H. C. and at al. (2003) examined the associations of certain risk factors with suicide among males and females aged 15–64, and the variation in the associations by gender. A case-control study was constructed from the 1993 National Mortality Follow back Survey in the United States. Information concerning age, race, education, living arrangement, marijuana use, excessive alcohol consumption, access to a firearm, depressive symptoms, and mental health service utilization was collected via death certificate and proxy respondent. Decedents between the ages of 15 and 64 who died by suicide were compared with those who died of natural causes. Logistic regression analysis was used to examine the associations between risk factors and suicide in males and females. Results: In comparison to those who died of natural causes, we found that marijuana use, excessive alcohol consumption, and access to a firearm increased the odds of suicide for both genders. For male decedents, the presence of depressive symptoms was more frequently reported for the suicide decedents in the 45–64 age group, and the proportion of mental health service use was higher among suicide decedents who did not complete high school. For female decedents, depressive symptoms were related to suicide in all age groups, and the use of mental health services was more frequent in the suicides of the 15–29 and 45–64 age groups.

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Brown S. L. and A. D. (2003) found that when individuals who receive social support are in poor physical or mental health and are criticized or made to feel unwanted; they may perceive themselves as a burden. Poor physical health and depression were hypothesized to exacerbate the harmful effects on suicidal ideation of receiving critical negative messages and of receiving social support. These hypotheses were tested using secondary analyses of data from a sample of 533 unemployed married individuals who were assessed shortly after job loss, and 6 months later. The results of our analyses supported the hypotheses and demonstrated that for participants with poor health or high level of depressive symptoms an increase in critical messages and social support (from Time 1 to Time 2) predicted increased suicidal ideation. This relationship was not observed for non- depressed participants in good health. The results are discussed in terms of their implications for suicide prevention.

Hesketh T., Ding Q. J., Jenkins R. (2002) quantified the rates and severity of self-reported depression and suicide ideation in middle-school students, to examine the relationship between depression and attempted suicide, and to identify socio-demographic associations. There were 1,576 completed questionnaires. One-third of the students had suffered symptoms of severe depression, with 16 % admitting to suicide ideation and 9 % to actually having attempted suicide. Factors independently associated with severe depression were female gender, poor self-reported academic performance and rural residence. Similar factors were associated with suicide ideation and attempted suicide. Depression was less common in those without siblings. Patterns of help-seeking showed reliance on friends and parents, with very low levels of professional help-seeking (around 1 %) and 30 % having sought no help from any source for psychological problems.

Bhatia M. S. and at al (2000) investigated psychological profile of suicide ideators, attempters and completers in a tertiary care teaching hospital. A total of 260 suicidal ideators, 58 attempters and 55 completers were studied. The majority of ideators, attempters and completers were 26-35 years of age, males (except attempters who were predominantly females), married, literate up to high school, employed (ideators) or housewives (attempters and completers). The suicide ideators, attempters and completers who had a past history of attempt were 6.9%, 24.1 % and 18.2% respectively. Family history of attempted suicide or completed suicide was also common among patients suffering from depression. In suicidal ideators, mixed anxiety and depressive disorder was the most common psychiatric diagnosis followed by

major depression and schizophrenia. Among suicide attempters, adjustment disorder with depression was the most common diagnosis. The most common method of suicide attempt was organ phosphorus compound intake whereas in suicide completers, the most common method in use was hanging. The patients with suicidal ideation or attempt need careful evaluation, early intervention and long term follow up.

<u>Kebede D</u>., and <u>Alem A</u>. (1999) investigated attempted suicide is one of the major risk factors for completed suicide, is associated with psychiatric disorders, and is also a potentially fatal event. We describe here a study of suicide attempts and ideation in a representative sample of 10,203 adults in Addis Ababa. The study was conducted between January and March 1994. The prevalence of current suicidal ideation was 2.7%. Lifetime prevalence of suicidal attempt was 0.9%. Most of the attempts (66%) occurred when subjects were under 25 years of age. Hanging was the preferred method for men and poisonings for women. There were no significant associations between suicide attempt and sex, ethnicity or religion. Current suicidal ideation was more common in men than women, odds ratio (95% confidence interval), OR (95% CI): 0.67 (0.48, 0.93). There was a statistically significant trend of decreasing risk of ideation with increasing age and educational attainment. There was a 68% decrease in the risk of ideation in the 60 years of age and above group compared to the 15-24 year group: OR (95% CI): 0.32 (0.16, 0.62). Marital status, ethnicity, and religion were not associated with suicidal ideation.

Kung, H. C., Liu, X., Juon H. S. (1998) examined that suicide rates for Caucasians are higher than those for African-Americans. However, there has been little research examining whether risk factors associated with suicide differ by race, when the effects of age, gender, and educational-occupational status are taken into account. A matched case-control study was constructed from the 1986 National Mortality Follow back Survey to address such concerns. Cases included all individuals aged between 25 and 64 years dying from suicide. Controls were those who died of natural causes, who were frequency matched to cases by age and gender. The study results for Caucasians indicate that those who had at least a high school education were more likely to commit suicide [odds ratio (OR) = 1.91; 95% confidence interval (CI) = 1.37-2.67] than those who had less than a high school education; those who were heavy drinkers were more likely to commit suicide (OR = 1.64; 95% CI = 1.16-2.33) than those who were light or moderate drinkers; those who lived alone were more likely to commit suicide (OR = 1.72; 95% CI = 1.28-2.30) than those who lived with others; those who had blue-collar occupations were more likely to commit suicide (OR = 1.79; 95% CI = 1.33-2.42) than those who had white-collar occupations; and those who had used mental health services were more likely to commit suicide (OR = 3.07; 95% CI = 2.34-4.01) than those who had not used them. For African-Americans, use of mental health services was the only factor significantly associated with suicide (OR = 4.56 95% CI = 1.69-12.29).

Etzersdorfer E. and at al (1998) compared attitudes towards suicide among medical students in Madras (India) and Vienna (Austria) using the SUIATT questionnaire by Diekstra and Kerkhof (1989). Results show a very restrictive attitude in Madras, rejecting the right to commit suicide, nearly always judging suicide as a cowardly act, and rejecting the idea of assisted suicide. On the other hand, in Vienna a more permissive attitude was found. It is interpreted that the Indian pattern comes close to a "medical" or "disease model", with stronger emphasis on mental illness, impulsiveness and emotional aspects, whereas the Viennese pattern reflects a "theoretical", "rational model", concentrating on cognitive factors and minimizing the influence of mental illness, emotional difficulties and restrictions related to suicidal behavior. This pattern may be influenced by the public discussion on assisted suicide and the right to die in Europe in the last decade. Possible relations to the risk for actual suicidal behavior are discussed using respective answers concerning previous suicidal ideation and suicide attempts. The answers concerning suicidal ideation seem to be strongly influenced by the different attitude patterns: only 16.8% reported previous suicidal ideation in Madras, compared to 51.5% in Vienna, whereas the percentage of reported suicide attempts is equal in both centers (5.9%:4.9%).

Heeringen V. C., and Jannes C. (1993) found the gender-specific rate of attempted suicide, calculated from hospital admission data, was significantly lower in 1990 than in 1986 in females and, when age is taken into account, in females younger than 35 and in males younger than 25

years. The incidence of suicide attempts seen by general practitioners also decreased. Indications for rejection of the artefact hypothesis as explanation for this decrease have been investigated. It was shown that the decrease has been investigated. It was shown that the decrease in the prevalence was found at local and national levels and was not the result of a decrease in referrals to general hospitals. Moreover, the decrease in the rate was associated with an increase in the use of outpatient mental health facilities in females and with a trend to increase in the 15–24 age group. The number of suicide attempts referred by Community Mental Health Services to the general hospital and the suicide rate in out-patients remained constant during the study period. The findings do not support the artefact hypothesis but indicate that there was a real decrease in the rate of attempted suicide. Moreover, the findings suggest that out-patient treatment can be efficacious in the primary prevention of suicidal behaviour.

Westrfeld J. S. (1990) identified trends in the literature on college student (CLS) suicide. Because most universities do not have and effective record keeping system for suicides, it is difficult to rather accurate data on attempted and completed suicides. Also data on suicide rates are inconsistent, Hopelessness isolation and increases stress seem to be major factors in suicide among CLSs. Suicide seems to elicit non accepting attitudes in some CLSs and to have and impact on college campuses. Suggestions are made for addressing the suicide problem at individual and institutional levels. Additional research is needed in the areas of suicide

rates, rate comparisons with 18-22 year old Non-CLS controls and program evaluation.

Evans A., Lvin L. (1990) revealed that Jung and others have noted that the content of dreams may be used to assess and individual's state of mind with regard to suicidal intent RE Litman(1981) has noted the difference between dreams related to suicide and dreams expressing the presence of clinical depression. Death dreams of elderly persons mat be considered expression of depressice symptoms, although this conclusion should be approached with caution, death dreams may also express the need for personality transformation. The author's impression on dreams and suicidal behavior, taken from clinical experience and experience in teaching courses on dream interpretation and suicide, are include (German & French abstracts).

Kotila L. & Lonnqvist j. (1989) investigated 422 subsequent suicide attempts committed by 362 persons (aged 15-19 year) in the Helsinki, Finland area in 1973-1982 in order to find risk factors for subsequent suicide or violent death, by the end of 1982, 13 Ss were dead; 5 boys and 3 girls had committed suicide. The risk ratios for suicide and violent death were greater for boys then for girls. Seriousness of intent appeared to heighten risk, whereas degree of lethality did not. Survivors who expressed difficulties as a reason for their suicide attempt seemed to have a smaller risk for suicide or violent death than Ss whose reasons remained unclear.

Ellis, S. B. & Range L. M. (1989) reviewed data on the demographic and personality characteristics of suicidal individuals demographically data indicate that individuals at higher risk include men, higher, older adults or

adolescents ad native Americans In teams of personality. Sis are described as having maladaptive affect (depressed irritable aroused and socially isolated) or maladaptive cognitions (hopeless having negative expectations field dependent cognitively riged and impulsive) Recent research has examined whether Sis lack important adaptive personality characteristics. The reasons for living inventory by M Lincham was developed with the emphasis.

Domina G. & Leenaars A. A. (1989) stated that result of administration of the suicide opinion questionnaire to 100 Canadian and 100 US undergraduates suggest substantial attitudinal difference and similarities. Canadian Ss perceived suicide as part of everyday life as an acceptable solution to incurable illness and for the aged inform not to be explained by recourse to religion personality or psychopathological constructs. Results are discussed in terms of 6 themes in the suicide literature motivation acceptability religion, impulsivity, reciclivism and misconceptions.

Diekstra R. F. (1989) found the scope of suicide and attempted suicide among adolescents and young adults (aged 15-29 years0 from an international perspective. Socio-demographic trends for the last 30 years suggest that act of suicidal behavior stem form an array of societal and individual factors. Explanatory theories for international differences and an international strategy for suicide prevention are proposed. Intervention approaches should be carried out in the framework of social and health policies that promote psychosocial and behavioral development and that targets family health and compensatory programs for disadvantaged youth.

Berman A. L. (1989) described the case of a 19 years old white male who became known as a behavior problem in Grade 10. He was referred to the school psychologist in his junior year after superficially cutting his wrist in front of classmates. The Suicide was referred for out patient psychotherapy with medication, he was hospitalized for 30 days because of persistent suicidal preoccupation. Following a 2nd overnight hospitalization after he swallowed 65 Tylenol tablets, he was placed in outpatient care of a psychiatrist for there by and medication. Two days after his last appointment he died of a self-inflicted gunshot wound. His parents instituted a lawsuit against the psychiatrist and clinic, alleging mal practice. Two consultants review the case from the plaintiff's and defense's perspectives and concur that the psychiatrist had fulfilled his obligation.

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Wellman R. J. & Wellman M. M. (1988) conducted to surveys assessing attituder toward belief about and personal expense with suicide in survey 1.473 undergraduates participated and 485undergraduates completed survey to rates of suicide attempt or threat were low (4% in survey 1.8 % in survey 2(compared with those reported in other college studies, seriousness of Ss own suicide ideation / behavior was related to the likelihood that they had been in conduct with another suicide; person usually a friend Ss whose own suicide ideation/behavior was serious were more accepting of suicide than were Ss whose own suicide ideation/ behavior was transitory or nonexistent. Results are compared with findings from other colleges' studies (e.g. B L Mishana) and from clinical literature and children and adolescents.

Stocker S. P. (1988) examined psychodynamics of the suicidal adolescent from an individual as well as a family systems perspective. Methods of assessment to help to clinician ascertain the seriousness of the suicide thinking or behavior are discussed treatment recommendations are presented.

Miklos B. & Panta L. (1988) discussed the predictive value of "suicidogenous" factors and the application of multiple regression analysis in suicide prediction. The article outline suicide incidence as the basis of the probability of prediction and discusses a study of predictive factors in 20 committed and 200 attempted suicide. The latter were examined in a psychiatric clinic in Novi Sad a region with one of the highest suicide rates in Yugoslavia. Multiple regression analysis was applied to 39 variables. It is concluded that in no single case would it be possible, but if these variable

were selected for the construction of a predictive instrument their predictive value would be certain.

Kotila L. & Jouko L. (1988) investigated 422 consecutive hospitalized suicide attempts made by 15-19 years olds in Helsinki 120 suicide attempts were made by 115 males and 302 by 247 females. Males had more server adaptive problems a poorer overall lives of functioning, and poorer physical health than female. Males physical mental and social problems they were susceptible to alcohol provoked suicidal behavior than females and presented less appealing motives. The out come of he males was worse than the outcome of the females. Five year follow up data are included.

Kalle A. (1988) observed from the suicide data available in Finland in 1981 that the elderly are more often likely to succeed in taking their own lives. Various susceptibility factors are explored with respect to loneliness brought on by the loss of loved once, a decreases in role and economic status, injuries to self esteem along with anxiety and insecurity and deteriorating body image and health. Depressive disorders and the many somatic symptoms though which they manifest are also detailed. It is concluded that the prevention of depression and suicide in the elderly requires a change of society's attitude toward the elderly.

Dyck R. J., Newman S. C. and Thompson A. H. (1988) examined the effects of age gender and geographical region on suicide rates in Canadians (aged 1st year) reported by the Canadian health and welfare department. Suicide rates were grater in western Canada for males and rates increased for both sexes in the province of Quebec while leveling off in other areas.

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Donald W. B. (1988) stated that death by suicide has been a growing problem among teenage and young adult males over the last 2 decades. The tendency for such suicides to occur in clusters (serial suicides related in time and space and etiologically related through the process of imitation) has concurrently increased. The general characteristics pf adolescent suicide is reviewed as are the special characteristics of cluster suicide and the culturally specific patterns of suicide among American Indians. A suicide cluster among teenage and young adult males of a plains Indian tripe is described and clinical implications for intervention strategies during a suicide cluster are discussed.

Brian B. (1988) examined the incidence of suicide in 15-24 years olds as reported by 70 members states (predominantly European with some Asian) to the world Health organization during 1972-1984. The suicide rate varied

between zero and 700 per million for male and zero and 550 for females. Northern and Eastern European status tended to have higher rates, lower rates were associated with Arab and Roman Catholic influences with some expiations. Unlike the familiar European pattern the female suicide rate was grater than the male rate for some Latin American and Asian countries.

Boldt M. (1988) argued that sociologists have made a fundamentals error in they have conceptualized suicide for purposes of causal analysis. They have adopted the universal, invariant standard of "willing and willful self-termination". This definition was designed to serve to needs of coroners and medical examiners in certifying and classifying suicidal deaths. Audiologists have erroneously used this definition for the purpose of deducing cases of suicide. Suicide is a cultural artifact; therefore cause of suicide can be understood only with reference to the socio-cultural norms and attitudes that govern each cultural community. To develop valid social scientific theories of causes, sociologists must make a paradigmatic shift from the prevailing universal invariant definition of suicide to systematic research into culture specific meanings of suicide.

Biro M. & Lazic P. (1988) discussed the predictive value of "suicidogenous" factors and the application of multiple regression analysis in suicide prediction. The article outline suicide incidence as the basis of the probability of prediction and discusses a study of predictive factors in 20 committed and 200 attempted suicide. The latter were examined in a psychiatric clinic in Novi Sad a region with one of the highest suicide rates in Yugoslavia. Multiple regression analysis was applied to 39 variable. It is

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Various susceptibility factors are explored with respect to loneliness brought on by the loss of loved once, a decreases in role and economic status, injuries to self esteem along with anxiety and insecurity and deteriorating body image and health. Depressive disorders and the many romantic symptoms though which they manifest are also detailed. It is concluded that the prevention of depression and suicide in the elderly requires a change of society's attitude toward the elderly.

Stephen P. S. (1987) explored psychodynamics of the suicidal adolescent from an individual as well as a family systems perspective. Methods of assessment to help to clinician ascertain the seriousness of the suicide thinking or behavior are discussed treatment recommendations are presented.

Pandey, R. (1985) analyzed the causes of suicide in contemporary India. The findings reveal that many factors (e.g. Psycho-social somatic) combine to cause on particular individual to divert aggression on self in the form of suicide, social emotional, cultural political and physical causes are examined using data from reports on accidental deaths in India for 1972-1979.

Kushner H. I. (1985) challenged the historical perspective that man are much more likely to commit suicide than women and proposes that the portrayal of suicide as a male behaviors reveals more about the assumptions that inform the collection of official statistics than about the conduct of women. It is contended that, historically female suicide has been interpreted as an individual emotional act, whereas male suicide has been considered a

barometer of national economic and social well-being statistical bases for the gender specific nature of suicides in the VS are reviewed. It is suggested that the focus on successful suicide attempts distorts the understanding of female suicides and fails to take into account differences in the lethality of methods employed. It is suggested that limiting official statistics on suicide to completions ensures that suicidal behavior among women will be trivialized when compared with self-destruction among men.

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Presutti, E. (1982) investigated that suicide is more frequently explained than empathically understood, possibly because of an aversion to and fear of the alien dimension of deliberate self destructions. This attitude is reflected in most psychologist refusal to view suicide as other than the acting out of

psycho-pathological self directed aggression. It is noted that many suicide attempts are not single minded efforts at self destruction and it is suggested that the metaphysical roots of suicide are related to a non contractual data comment from human assistance and the irresistible impulse to achieve in death a social self-regeneration and psychic completeness in the dimension of the Jungian unconscious. A common denominator is seen to suicidal person's inability to go on living when the "motion" of existences comes to a standstill and flux is replaced by stagnation.

Rudd M. D. (1998) surveyed 287 male and 450 female university students (aged 16 -30 years) using a psychometrically sound self report measure of suicidal ideation. In general findings indicate that the problem of youth suicide involved a large percentage (43 %) o Ss and provide indirect support for the hypothesis that the difference in male female completed suicide rates was a function of the lethality of the attempts suicide ideation was also related to specific demographics trails.

CHAPTER – 3

RESEARCH METHODOLOGY & DESIGN

i) Variables

ii) Sampling

iii) Hypothesis of the study

iv) The procedure of collection and analysis of data

v) Psychometric Description of Tools of data collection and Statistical Analysis

CHAPTER-3

RESEARCH METHODOLOGY & DESIGN

INTRODUCTION:

Every study in its planning phase is connected with the important problem of suitable methodology. In this chapter, the mechanism of identifying the respondents and procedure of collecting information has been described. No research without a suitable methodology can be reliable and valid. In methodology many aspects of research like selecting of a problem, framing of hypothesis and selection of the level of the variables and their controls is a matter of concern.

Research methodology is a way to systematically solve the research problems. As Kerlinger (1968) said "Scientific research is systematic controlled, empirical and critical investigation of hypothetical proposition about the presumed relation among natural phenomena."

The present investigation is the study to know the effect of Pranayam on aged persons in relation to suicide ideation.

STATEMENT OF THE PROBLEM

What influence does *pranayama* exert on aged persons in relation to suicide ideation?

OBJECTIVE OF THE STUDY

On the basis of above mentioned problem following objective was framed:

- To visualize the effect of Pranayama on aged persons in relation to suicide ideation.

VARIABLES

D'Amato has defined variable as "any measurable attribute of object, things or beings. The measurability requirement of an attribute need not be quantitative; it can be qualitative also such as race, sex and religion."

To prove the framed hypothesis the variables were used in two categories namely independent variables and dependent variables.

- Independent variable: It is the variable that is controlled and manipulated by the experimenter.

  "An Independent variable is the presumed cause of the dependent variable." (Ker linger)

  In this study the independent variable was mental health of people living in ashram.

- Dependent variable: It is the variable that is measured by the experimenter.

  "A dependent variable is that factor which appears, disappears or varies as the experimenter introduces, removes or varies the independent variables." (Townsend)

VARIABLES UNDER PRESENT STUDY:

INDEPENDENT MEASURES:

- **Pranayam** has been taken as an independent variable in this study.

DEPENDENT MEASURES:

- **Suicide Ideation** of aged persons is dependent variable.

THE SAMPLING

It is not always practical to obtain measures from a total population due to factors such as, expenses, time accessibility, etc. And so the researcher has to collect the information from a smaller group or subset of the population, assuming that the information gathered is representative of the whole population under study. The smaller group or set is known as sample. The basic distinction in modern sampling theory is between probability and non-probability sampling. The essential characteristics of probability sampling is that one can specify, for each element of the population, the probability that will be included in sampling.

In the simplest case, each of the elements has the same probability of being included, but this is not a necessary condition, what is necessary is that for each element there must be some specific probability to be included.

Probability sampling is the only approach that makes possible representative sampling plans. It makes it possible for the investigators to estimate the extent to which the findings based on the sample are likely to differ from what they would have found by studying the population. Conversely, the non-probability samplings are those, which do not provide

every item in the universe with a known chance of being included in the sample. The reflection process is at least partially subjective.

The major advantages of non-probability sampling are convenience and economy-advantages that may out-weigh the risks involved in not using the probability sampling. Major forms of non-probability samples are accidental (incidental), quota sampling & purposive sampling and the important forms of probability samples are simple random samples, stratified random samples, and various types of cluster samples. One form of non-probability sampling is quota sampling, in which knowledge of strata of the population–sex, race, region, and so on–is used to select sample members that are representative, "typical,' and suitable for certain research purposes. Quota sampling derives its name from the practice of assigning quotas, or proportions of kinds of people, to interviewers. Another form of non-probability sampling is purposive sampling, which is characterized by the use of the judgment and a deliberate effort to obtain representative samples by including presumably typical areas or groups in the sample. So-called "accidental" sampling, the weakest form of sampling, is probably also the most frequent.

SAMPLING IN THE PRESENT STUDY:

From the universe a total sample of 60 aged persons consisting of 30 men and 30 women has been drawn from Shantikunj, Haridwar and Patanjali Yogpeeth Phase II, Haridwar. Out of which 30 aged persons (15 men and 15 women) were selected through simple random technique. Age range of the aged persons was 60 to 75 years.

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CONTROL:

The present study was controlled on the basis of following criteria such as:

- Age range between 60 to 75 years.
- Aged persons were capable physically to do pranayama daily.
- 50-60 minutes were taken in completing the whole session of pranayam processes.
- All the aged persons were given the practice of pranayama for two months.

RESEARCH DESIGN:

Single group study was planned to conduct Pre-Post test design. It was used to find out the effect of pranayama on aged persons in relation to Suicide Ideation.

HYPOTHESIS

To fulfill the above mentioned objective of the study, the following hypothesis was framed:

- The level of Suicide Ideation in aged persons will be decresed after practicing *Prayanama.*

PSYCHOMETRIC TOOLS

1. Tool for data collection
2. Tool for statistical analysis

1. **BECK SUICIDE IDEATION SCALE**

PROFILE:-

Tool - Beck Suicide Ideation Scale

Author - Aaron T. Beck & Maria Kovacs

Nature - Verbal, Both Literate and Illiterate

Group/Individual - Both

Age Range – For Both- Adolescents and Adults.

Duration – No time limit (Average time 10-15 minutes)

Structure - 19 Items

Reliability – Internal Consistency 0.89 & Interrater 0.83

Validity - High

Availability – Aaron T. Beck, University of Pennsylvania School of Medicine, 133 South 36th Street, Room 602, Philadelphia, Pennsvlvania 19104.

DESCRIPTION

Since suicide continues to be one of the 10 leading causes of death in the United States, the measurement of suicidal risk and the identification of persons likely to make fatal or nonfatal suicide attempts remain high priorities. In recent years, these goals have been pursued primarily through the assessment of psychological, psychiatric, and demographic variables. According to extensive reviews of the literature (Brown & Sheran, 1972;

Lester, 1970, 1974), standard psychological tests such as the Rorschach, the TAT, and the MMPI cannot differentiate suicidal from nonsuicidal individuals and have not been found to be useful predictors of suicidal risk. These same reviewers suggest that at the present time, the best predictors of the criterion behavior are specially constructed scales that encompass various attributes of suicidal behaviors.

In recent years, the bulk of the work in suicidology has been targeted on two of the three populations, namely attempted suicides and completed suicides. The third category of suicidal behaviors, namely suicide ideators have not been given much attention. Suicide Ideators are individuals who currently have plans and wishes to commit suicide but have not made any recent overt suicide attempt (Beck et al., 1972). Since suicide ideation logically precedes a suicide attempt or completed suicide, it seems appropriate to focus on the intensity, pervasiveness, and characteristics of the ideation and wish in order to assess current suicidal intention and potentiality to predict later suicide risk.

The development of the scale for Suicide Ideation was prompted by the need for a valid research instrument to identify suicidal individuals and to investigate meaning correlates of suicidal ideation. The scale for suicide ideation was designed to quantify the intensity of current conscious suicidal intent by scaling various dimensions of self-destruction thoughts or wishes. Suicidal ideation also encompasses "suicidal threats" that have been expressed in overt behavior or verbalized to other. The authors emphasized that at present, the scale for suicide ideation is primarily a research a

research tool to be employed in the investigation of suicidal ideation and its correlates.

The items on the scale were partly clinically derived and partly rationally derived. Systematic observations and interviews of suicidal patients yielded a list of salient preoccupations, concerns and wishes, thinking and behavior patterns. Those areas were then selected which seemed to reflect the spectrum of suicidal preoccupations most frequently observed in the patients verbalizations and behaviors. Previously reported research studies yielded additional content areas. An initially devised 30-items scale was administered to 35 suicidal patients. Those items were unwieldy, or that were difficult to score. On the basis of this selection process, the clarity and working of the remaining items were improved and a 19-items scale was constructed. Each item consists of three alternative statements graded in intensity from 0 to 2. The total score is computed by adding the individual item scores. Thus, the possible range of scores is 0 to 38.

The items assess the extent of suicidal thoughts and their characteristics as well as the patients attitude towards them; the extent of the wish to die, the desire to make an actual suicide attempt and details of plans; if any, internal deterrents to an active attempt; and subjective feelings of control and/or courage regarding a proposed attempt.

RELIABILTY

The internal consistency of the SSI was evaluated through two methods. First, an item analysis showed that each item had positive

correlation with the total scale score and that 16 of the 19 coefficients were significant. The second method of evaluation internal consistency was the determination of coefficient alpha. KR-20 (Cronbach 1951). For the 90 cases, a reliability coefficient of 0.89 was obtained.

With respect to inter-rater reliability, twenty-five out of the 90 consecutively admitted two clinicians who alternated in interviewing successive patients saw patients concurrently. Following the interview, each clinician independently completed the SSI. The inter-rater reliability coefficient was 0.83 (< .001).

VALIDITY

Concurrent validity

Concurrent validity of the SSI was evaluated by determining how well the scale scores correlated with other measures of suicidal ideation or suicidal risk such as clinical evaluation and psychological inventory scores.

The SSI scores were also compared to the "Self-harm" item of the Beck Depression Inventory (BDI: Beck, 1972), independently obtained by a research assistant correlation between ideation scores and the BDI item was .41 ($p < .001$). The relatively low correlation may reflect the limited range (0-3) on the BDI item.

Discriminative Validity

Since the SSI was partly designed as a research-screening instrument. It may be expected to discriminate to between groups who, on a prior basis, can be assumed to differ in degree of suicidal intent. Comparisons of the

SSI scores of the 90 patients hospitalizes for suicidal ideation (M= 9.43, SD = 8.44) and 50 outpatients who sought psychiatric treatment for their depression (M = 4.42, DS = 5.77) yielded a significant between-groups difference, $t = 4.14$, $p < .001$. The two groups were similar in degree of depression as measured by the back Depression Inventory, $t = .67$, NS. The finding is consistent with the fact that upon hospital admission, the majority of the ideators were diagnosed as having depressive disorders.

Construct Validity

Evidence for construct validity was also obtained. The SSI scores from the previously described 90 patients were also used to test a number of hypotheses relevant to the construct under investigation. The major hypothesis tested was that hopelessness is more closely related than depression to the extent of suicidal ideation. This hypothesis was based on previous findings that among suicide attempters the statistical association between suicidal intent and depression is an artifact resulting from their joint attachment to a third variable, namely, hopelessness. Using the SSI as the criterion measure we found that both hopelessness and depression positively correlated with the extent of current suicidal ideation ($r = 0.47$, $p < .001$ and $r = 0.39$, $p < 0.001$, respectively). When BDI scores were partialed out, the correlation between the hopelessness and suicide ideation was still significant ($r = 0.32$, $p < 0.001$). On the other hand when HS scores were removed statistically, the correlation between the BDI and Ideation scores was not significant. To obtain a further estimate of the power of the BDI and HS to predict suicidal ideation, the sample of 90 patients was

divided into two roughly equal-sized groups based on the median scores for both hopelessness and depression. The group with high hopelessness had higher mean ideation scores. The construct validity of the scale has been also confirmed by Wetzel (1975). He studied suicidal patients and non suicidal controls from three psychiatric hospitals. Based on their SSI scores, the ideators were ranked from zero to high intent. The data indicated that with increased severity of suicidal intention, patients had significantly less favourable ratings of the concept of "life". Moreover, suicide ideators ranked by SSI levels also differ on ratings of the concepts of "myself" and "suicide", low SSI score being associated with more favourablesemantic ratings (Wetzel, 1976b).

SSI provides an ideal tool as an independent variable in the investigation of psychological and clinical correlates of suicide ideation. It may also be employed as a dependent variable measure in studies that assess the efficacy of treatment intervention with suicidal individuals. At the present time, the SSI appears to have real potential as a research instrument. It may be used not only as an independent variable to discriminate among individuals varying in degree of suicidal ideation but also as a dependent measure to quantify change resulting from treatment intervention. Moreover, the scale may also be of help to the clinician in the systematic gathering and quantification of data relevant to patients' or clients' thoughts, plans and wishes about suicide.

ADMINISTRATION:

1. The simple and clear instructions are printed on the top of the first page of Scale for Suicide Ideation. After the examinee has read the instructions, the administrator should answer an question that may arise. After reading each question the subject is asked to encircle the suitable one out of three given options for each question. There is no time limit to answer the scale, complete it as early as possible. It is necessary to answer each question, do not left any one.

SCORING AND INTERPRETATION:

Scale for Suicide Ideation is a 19-items scale. Each item consists of three alternative statements graded in intensity from 0 to 2. The total score is computed by adding the individual item scores. Thus, the possible range of scores is 0 to 38: minimum score: 0; maximum score: 38. A higher score indicates a greater intention or ideation for suicide. Item subsets can be used to identify 3 factors associated with suicide risk (350 scores > 0.50):

- active suicidal desire (10 items: wish to live wish to die reasons desire for active attempt passive desire duration frequency attitude toward thoughts deterrents reason expectancy)
- specific plans (3 items: method planning method opportunity actual preparation)
- passive suicidal desire (3 items: passive suicide desire sense of capability deception/concealment)

2. **STATISTICAL TOOL: t-test**

A t-test is any statistical hypothesis test in which the test statistic follows a student's t distribution if the null hypothesis is supported. It can be uses to determine if two sets of data are significantly different from each other, and is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data.

Among the most frequently used t-tests are:

1. A one- sample location test of whether the mean of a population has a value specified in a null hypothesis.
2. A two-sample location lest of the null hypothesis that the means of two populations are equal. All such tests are usually called student's t-tests, though strictly speaking that name should only be used if the variances of the two populations are also assumed to be equal: the form of the test used when this assumption is dropped is sometimes called Wetch's t-tests, as they are typically applied when the statistical units underlying the two samples being compared are non-overlapping.
3. A test of the null hypothesis that the difference between two responses measured on the same statistical unit has a mean value of zero.

The formula used to determine t-value to test difference between the level of suicide ideation of aged persons in pre-test and post-test.

$$\text{t-value} = \frac{M_1 \sim M_2}{SE_D}$$

SE_D = standard error of difference between means

$$SE_D = \sqrt{\sigma^2{}_{M_1} + \sigma^2{}_{M_2} - 2r\sigma_{M_1} \times \sigma_{M_2}}$$

Coefficient of Correlation (r)

$$r = \frac{\sum xy}{N\sigma_x\sigma_y}$$

The arithmetic mean (M)

The arithmetic mean or mean simply the mean or more simply the mean is the sum of the separate score of measures divided by their number the formula for the mean (M) of a series of ungrouped measures is-

$$M = \frac{\sum X}{N}$$

The standard deviation or SD

The standard deviation or SD is the most stable index of variability and is customarily employed in experimental work and in research studies. In finding the SD we avoid the difficulty of signs by squaring the separate deviation. Again, the squared deviations used in computing the SD are always taken from the mean, never from the median or mode. The conventional symbol for the SD is the Greek letter sigma.

$$SD = \sqrt{\frac{\sum x^2}{N-1}}$$

CHAPTER - 4

RESULTS

And

DISCUSSION

CHAPTER-4

RESULTS AND DISCUSSION

STUDY-1

Hypothesis: Practice of pranayama will decrease the level of Suicide ideation in aged persons.

TABLE : t-test

Showing effect of Pranayama on aged person in relation to suicide ideation by comparing the pre-test and post-test results.

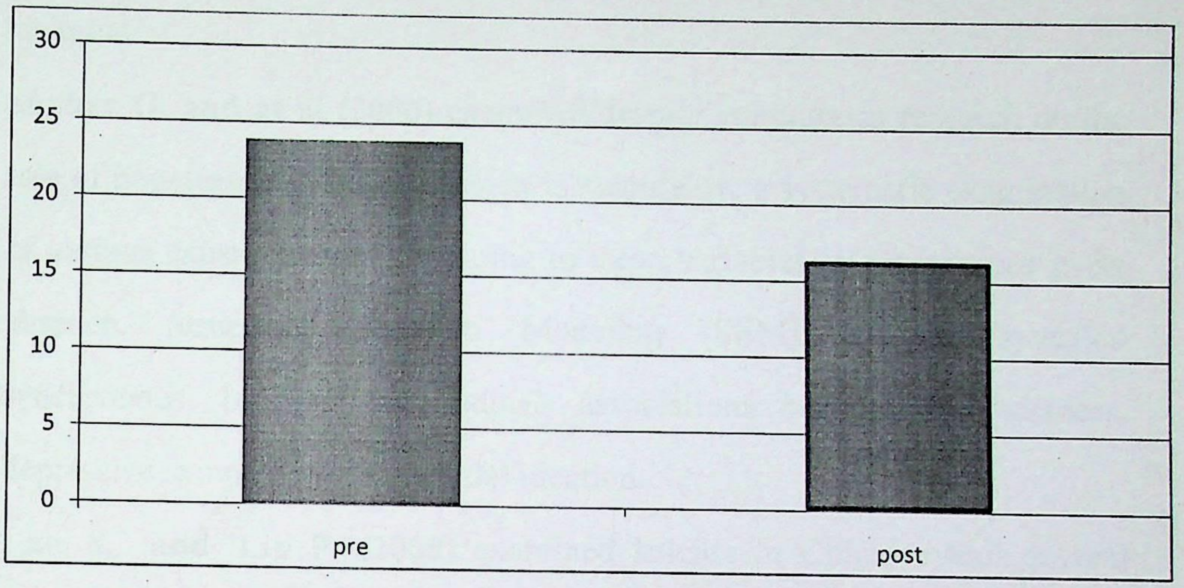
	N	Mean	SD	r	SE_D	df	't'-value	Status of Significance
Pre-test	30	23.9	7.64	0.67	1.18	29	7.12	Significant *
Post-test	30	15.5	8.30					

$t_{0.05}(29)= 2.04$*

$t_{0.01}(29)=2.76$*

Above table depicts that't'-value is highly significant at 0.01 level of significance. Hence, the difference between means of pre-test and post-test is true. The hypothesis formulated during the study is accepted. The level of Suicide ideation in aged persons has been found significantly low after practicing *prayanama.*

Results are also shown with the help of graphical representation. They are as follows:



GRAPH SHOWING MEAN VALUES OF PRE AND POST DATA

DISCUSSION

Various social and psychological factors as well as health conditions play a role to develop suicide ideations in aged persons. Suicide ideation creates a constant devaluation of all life events in aged persons. They judge negatively all aspects of their life. Ultimately it may develop persistent stress in them and it precipitates the psychosomatic and other psychological complaints in the individual. This investigation explores that practicing pranayama decreases the level of suicide ideation in aged persons. It may be due to breathing exercises boost the oxygen level in the body especially in mind. These types of Pranayama increase the concentration of the individual. It helps to overcome the unusual thinking and misperceptions of life that is

responsible for developing negative attitude in the individual. These negative thinking make the person helpless to face the old age problems in proper manner and the aged person starts developing the suicide ideation in his mind.

Shahar G. and at al (2006) examined despite voluminous research on the role of hopelessness and depression in suicidality, a systematic examination of various causal models pertaining to these variables is conspicuous in its absence. Structural Equation Modeling (SEM) analyses revealed synchronous, but not longitudinal, associations between hopelessness, depressive symptoms, and suicidal ideation.

Law S. and Liu P. (2008) examined suicide in China reveals several unique findings: (1) female suicides outnumber male suicides by a 3:1 ratio; (2) rural suicides outnumber urban suicides by a 3:1 ratio; (3) a large upsurge of young adult and older adult suicides has occurred; (4) a comparatively high national suicide rate two to three times the global average is evident; and, most startlingly, (5) a low rate of psychiatric illness, particularly depression, exists in suicide victims. The strongest empirical data suggest that these trends result from a high number of rural, young females who experience acute interpersonal or financial crises and then impulsively attempt suicide using lethal pesticides or poisons. Other suicide risk factors in China are similar to those that are well known internationally. Interactive sociological, cultural, and economic hypotheses unique to China provide further insight. Among those, the cultural-socioeconomic disadvantages of the Chinese rural female and cultural attitudes toward suicide are particularly noteworthy.

Mofidi N., Ghazinour M., and et. al. (2006) examined attitudes towards suicide represent a key stage in the pathway leading to suicide. A deeper understanding of the social, psychological and treatment-related factors influencing the development of attitudes towards suicide could guide suicide prevention strategies especially in a neglected population like Kurds. In a cross-sectional study in Iranian Kurdistan, 1,000 households participated in the investigation from April to May 2006 selected by a cluster random sampling process. A questionnaire on attitudes towards suicide (ATTS) was used to measure suicide related attitudes and thoughts. Suicide related experiences were more often reported from the wider social network (relative, friends, acquaintances) than from family members. There is a significant accumulation of suicide related experiences when a related event was reported in the close family. The level of suicide related attitudes is related to age, gender, marital status, level of education and employment status

Gençöz T. and Or P. (2006) suggested that family environment is a significant associate of suicide.

Leary C. E. and et. al. (2008) suggested that experiencing physical discipline as a child may be related to one's family environment and psychological well-being in young adulthood.

CHAPTER - 5

SUMMARY, CONCLUSION

And

SUGGESTIONS

CHAPTER-5

SUMMARY, CONCLUSION AND SUGGESTIONS

(A) THE SUMMARY

The **'Final Report'** of the dissertation, runs into **five chapters**. The first chapter gives the "Conceptual Framework". The problem entitled, **"Effect of Pranayama on Aged Persons in relation to Suicide Ideation"** is explained and its variate frame is systematically presented. Suicide ideation as internal problem, needs a sound understanding. This chapter provides the detailed knowledge about different types of Pranayama and their procedures and main benefits.

The terms of the problem are explained and discussion is made of the variate systems behind them. The chapter ends with the mentioning of the objective in this study.

The second chapter is the review of literature. It briefly compiles the related works from different corners of the world.

The third chapter is about 'Research Methodology and Design'. The treatment of the chapter includes the nature of the study, the design, followed by the 'variate structure' of the study. The independent and intervening variables are described and discussed. The chapter mentions the hypothesis of the study. The tools of data collection and statistical analysis are presented. Sampling is discussed in detail. The chapter ends with mentioning of the procedure of collection and analysis of data.

The forth chapter of the study is about 'Result and Discussion'. The results of data for suicide ideation are presented. Rejection or retention of hypothesis is discussed. The empirically verified results are put for discussion with comparison to other studies.

The fifith chapter is on Summary, Conclusion and Suggestions. The chapter presents the summary view of all that has been done with conclusion and some suggestions are made for future research-purposes. New directions have been suggested.

(B) THE CONCLUSION

Various social and psychological factors as well as health conditions play a role to develop suicide ideations in aged persons. Suicide ideation creates a constant devaluation of all life events in aged persons. They judge negatively all aspects of their life. Ultimately it may develop persistent stress in them and it precipitates the psychosomatic and other psychological complaints in the individual. This investigation explores that practicing pranayama decreases the level of suicide ideation in aged persons. It may be due to breathing exercises boost the oxygen level in the body especially in mind. These types of Pranayama increase the concentration of the individual. It helps to overcome the unusual thinking and misperceptions of life that is responsible for developing negative attitude in the individual. These negative thinking make the person helpless to face the old age problems in proper manner and the aged person starts developing the suicide ideation in his mind.

The area of investigation remains highly prospective and new. Results of more sophisticated researches in the area would pave way to new vistas of research.

(C) SUGGESTIONS

1. Multivariate research in place of univariate one is needed.
2. The sample must be larger for the purpose.
3. Other age groups with different socio-economic settings e taken up for the purpose.
4. Both the sexes, males and females, may be further compared.

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APPENDIX

आत्महत्या-विचार-पैमाना

हर प्रश्नावली में कुछ प्रश्नों (वाक्यों) के समूह दिये गये हैं जिन्हें ध्यानपूर्वक पढ़ें तथा प्रत्येक समूह में से 0,1,2,3 जो आपको उपयुक्त लगें, किसी एक को घेर दें। प्रश्नावली का उद्देश्य मात्र प्रतिक्रियाओं को जानना है। अतः एक-एक प्रश्न ध्यान से पढ़ते हुए और अपनी प्रतिक्रिया देते हुए जल्दी से जल्दी समाप्त करने की चेष्टा करें। सभी प्रश्नों के उत्तर देना अनिवार्य है।

1 जीने की इच्छा
- 0 सामान्य से अधिक
- 1 बहुत कम
- 2 कोई इच्छा नहीं

2 मरने की इच्छा
- 0 बिल्कुल नहीं
- 1 बहुत कम
- 2 सामान्य से ज्यादा

3 मरने अथवा जीने के कारण
- 0 मरने से जीने की ज्यादा इच्छा है
- 1 दोनों बराबर हैं
- 2 जीने से मृत्यु की ज्यादा इच्छा है

4. आत्महत्या करने की सक्रिय इच्छा
- 0 बिल्कुल नहीं
- 1 बहुत कम
- 2 सामान्य से ज्यादा

5 आत्महत्या करने की निष्क्रिय इच्छा
- 0 जीवन को बचाने के लिए सावधानी रखूंगा/रखूंगी
- 1 जीवन/मृत्यु को भाग्य के भरोसे छोड़ दूंगा/दूंगी
- 2 मैं जीवन को बचाने अथवा बनाए रखने के लिए जरूरी कदम नहीं उठाऊंगा

6. समय सीमाः आत्महत्या करने के विचार/इच्छा की अवधि (Duration)
- 0 थोड़े समय तक
- 1 लम्बे समय तक
- 2 हर समय

7 समय सीमाः आत्महत्या के विचार की बारम्बारता (Frequency)
- 0 कभी-कभार
- 1 बीच-बीच में
- 2 लगातार

8 आत्महत्या विचार या इच्छा के प्रति आपकी अभिवृत्ति (Attitude)
- 0 अस्वीकार करना
- 1 अनिश्चित
- 2 स्वीकार करना

9 आत्महत्या करने की इच्छा/क्रिया पर नियन्त्रण
- 0 नियन्त्रण की भावन होना
- 1 नियन्त्रण की भावना अनिश्चित होना
- 2 नियन्त्रण की भावना न होना

10 सक्रिय प्रयास में अवरोधक (उदाहरण परिवार, धर्म, अपरिवर्तनीयता)
0 अवरोधक के कारण प्रयास नहीं किया गया
1 अवरोधकों का कुछ ख्याल किया गया
2 अवरोधकों पर कोई ध्यान नहीं दिया गया

11. आत्महत्या करने की कोशिश के पीछे मुख्य कारण क्या था
0 वातावरण को अपने पक्ष में बदलना, ध्यान आकर्षित करना, बदला लेना
1 0 और 2 दोनों
2 छुटकारा पाना, समस्याओं का समाधान

12. आत्महत्या की कोशिश करने से पहले क्या आपने कोई विशेष तरीका या विधि के बारे में सोचा था।
0 नहीं सोचा
1 सोचा था, परन्तु योजना तैयार नहीं की
2 सुनियोजित योजना तैयार की गई

13. आत्महत्या की कोशिश के अवसर/उपलब्धता
0 कोई तरीका नहीं, कोई अवसर नहीं
1 इसके लिए प्रयास/समय लगेगा, कोई अवसर आसानी से उपलब्ध नहीं
2क अवसर व तरीके की उपलब्धता
2ख भविष्य में तरीके की उपलब्धता या अवसर की आशा

14 आत्महत्या का प्रयास करने की क्षमता की भावना
0 साहसहीनता/बहुत कमजोर डरना, अयोग्य
1 साहस एवं योग्यता में अनिश्चितता
2 योग्यता एवं साहस में निश्चितता

15. आत्महत्या के वास्तविक प्रयास को होना/संभावना
0 बिल्कुल नहीं
1 अनिश्चित
2 हाँ

16. क्या आपने आत्महत्या के प्रयास की वास्तविक तैयार की थी।
0 कोई नहीं
1 आंशिक (उदाहरण खतरनाक गोलियां इकट्ठा करना प्रारम्भ किया)
2 पूर्णतया (उदाहरण, गोलियां खाई या बन्दूक से गोली भरी)

17. क्या आपने कोई आत्महत्या पत्र लिखा था।
0 कोई नहीं
1 प्रारम्भ किया परन्तु पूरा नहीं किया गया।
2 पूरा किया गया।

18. क्या अपने मुत्यृ की संभावना में कोई अन्तिम कार्य (उदाहरण- बीमा, वसीयत) किया था।
0 कोई नहीं
1 सोचा गया, या कुछ तैयारी की गई
2 निश्चित योजना बनाई गई या पूर्ण तैयारी की गई

19. आत्महत्या की कोशिश के बारे में क्या अपने छुपाया था
0 सभी को बता दिया था
1 विचारों को बताने की इच्छा की परन्तु बताया नहीं
2 मैं सबको धोखे में रखना चाहता था, किसी को नहीं बताया।